Tested **TREK RAIL+, SPECIALIZED TURBO LEVO, SANTA CRUZ HIGHTOWER**

AUSTRALIAN MOUNTAIN BIKE

AMB

FIRST RIDE ON NEW **SHIMANO XTR DI2**

CHOOSE YOUR OWN ADVENTURE

TOP TIPS FOR **HIT TRAINING**

FLASHPACKING **WITH BOSCH**

WE TEST NEW **SRAM EAGLE 90**

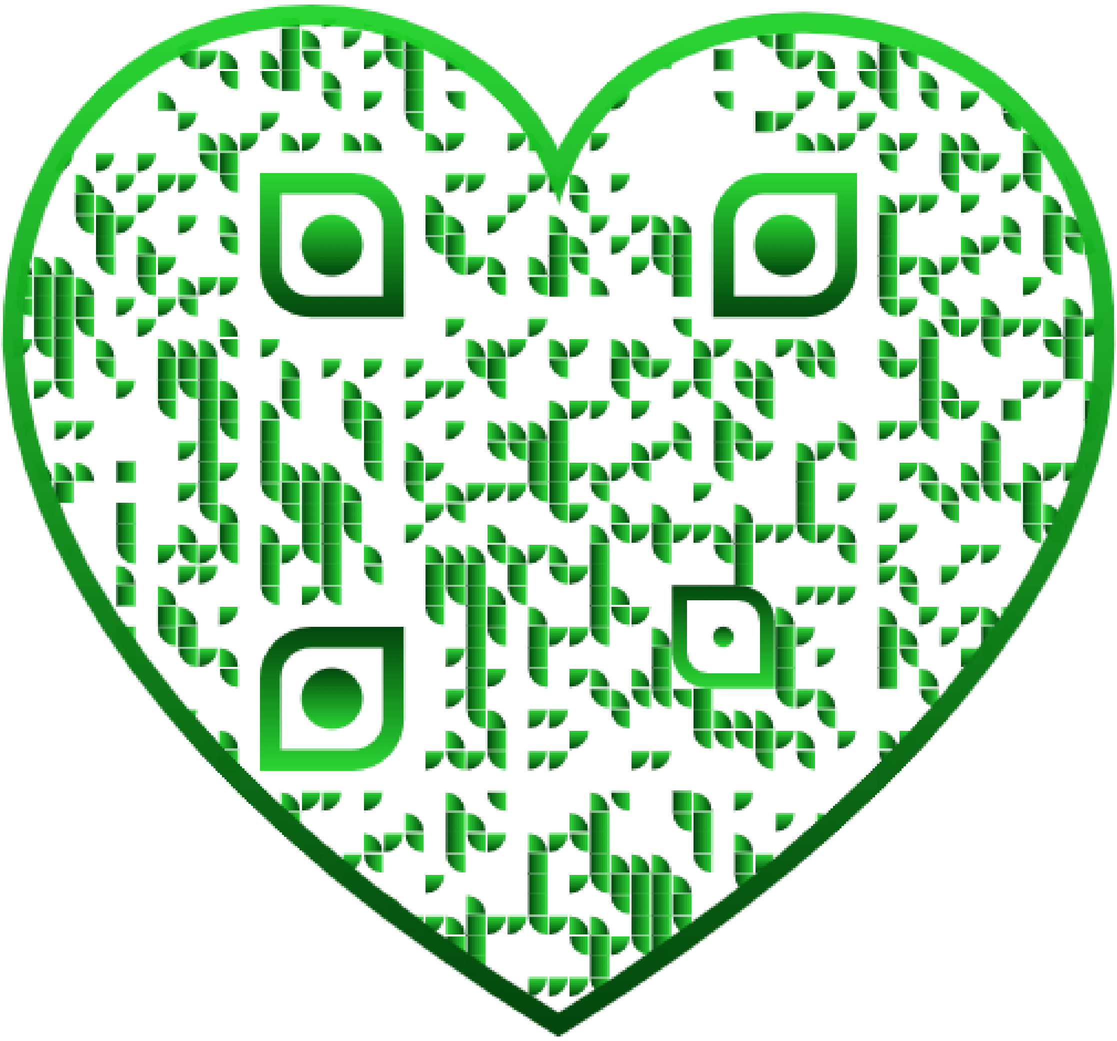
CHASING THE NORTHERN LIGHTS
A GRAVEL ADVENTURE IN FINLAND

RIDING MOGO'S **NEW ADVENTURE TRAIL**

THE **MTB REVOLUTION** IN SCHOOLS

AUS $13.95 • NZ $13.95

9 312796 000081



Robust.
Intuitive.
Consistent.

XTR

XTR

LEVO 4

Where Super Meets Natural

The Specialized Science Club Introduces the Levo 4, an electric mountain bike so advanced it transforms you into a cycling cyborg. Together you're SuperNatural, fortified with up to 720 watts and 111 NM of super power and up to 5.33 hours of super range to conquer any off-road terrain. Levo 4, Where Super Meets Natural.

S-WORKS
BUTCHER
BUTCHER

specialized.com

SPECIALIZED

Red Bull
Precision.
It's All
Emil Knows.
G-FORM
G-FORM
MTB
DIRECT
x
G-FORM

Red Bull
G-FORM

@johanssoemil

At just 25, Emil Johansson has become one of the most creative riders in the world. Thirteen Crankworx golds, four Slopestyle World Titles, and three Triple Crowns—all driven by the excitement that riding brings.

“It’s definitely not an easy task to envision something from a blank slate,” says Emil. “And if I don’t have these tricks on lock, then I’m going to crash.”

From the outside, it’s freestyle, but when you dig into it, there’s only accuracy and control in Emil’s technique. And that’s the point. Precision is all he knows. His signature collection with G-Form is a reflection of that mindset. The new G-Form EJ Knee and Elbow Pads are engineered for elite performance, giving confidence for fearless creativity.

Available at MTB Direct.
Scan the QR code to shop now.

.ORG.AU
.ORG.AU
AUSC

PHOTO: **MATT ROUSU**

Luke Meier Smith made it a three-peat winning the 2025 AusCycling Downhill National Championships ahead of Troy Brosnan.

PHOTO: **MATT ROUSU**

↖ The sun was out for the cross country short track race at the 2025 AusCycling Mountain Bike National Champs. Australian icon Rebecca Henderson peeks out above the Victorian alpine vista ahead of a flying Izzy Flint. Henderson ultimately clinched the win in both the short track and XCO.

PHOTO: **MATT ROUSU**

Back from the European World Cup circuit, Sam Fox found the mongrel in him to take the win in the Elite Men's XCO event. The skies opened up for XCO day and the dangerous winds saw the event course shortened, with riders undertaking an attenuated race in both course length and race distance. Fox showed his experience in European conditions in a dominant solo performance.

Contents

ISSUE #213

FAST TRACK

16 Editorial
18 News
22 New Products
24 Subscriptions
26 Calendar
28 X-Factor
30 Trail Talk
32 Gravity Check
34 Mind Body Bike

FEATURES

36 THE BIG ADVENTURE
Chris gives you his hot tips learned from a Flashpack adventure that didn't quite go to plan.

38 BIG BIKE FILM NIGHT
We check out some highlights from the 2025 event

44 BEYOND THE BIKE PARK WITH BOSCH
We explore how to set yourself up for the best overnight mountain biking experience with Bosch.

46 NATIONAL CHAMPS 2025
Matt Rousu writes a wrap on the 2025 AusCycling National Champs, who has taken the green and gold stripes?

52 MOGO'S NEW JEWEL
Olive Tutt and Jordan Riddle check out Mogo's brand new adventure trail, Burnaaga-Goanna.

62 NEXT GENERATION
Annie Arnott does a deep dive into the rise of mountain biking in schools.

70 NZ MTB RALLY
Perhaps the most epic enduro mountain bike race on the planet, Stephen takes us behind the scenes at the NZ MTB Rally

78 FOXFIRE AND GRAVEL: TRAILS BEYOND THE ARCTIC CIRCLE
Gravity Riders Anita and Caro Gehrig go on an epic gravel adventure to see the northern lights.

TESTED

90 Trek Rail+ 9.8
94 Santa Cruz Hightower
99 Specialized Turbo Levo Pro
104 Shimano XTR Di2
108 SRAM Eagle 90 and Motive brakes
112 Pure Race Ready Nitrates
114 Wahoo Ace, Roam 3 and Bolt 3
116 Granite Stash
118 StokedNZ Towelies

120 Skills
122 Nutrition
124 Fitness
126 Workshop

COVER: Mat Weirm shreds the hills above Wanaka on the brand new Shimano XTR Di2 Photo: Cam Mackenzie

THIS PAGE: Something truly special is happening at Mogo. Olive writes all about it on page 52. Photo: Jordan Riddle.

AMB

Editorial enquiries anna@adventureentertainment.com
Editor Anna Beck
Art Director Allan Bender

WORDSMITHS
Annie Arnott, Anna Beck, Kath Bicknell, Martin Bissig, Mike Blewitt, Ella Bloor, Bam Da Silva, Elle De Nooyer, Josh Firth, Andy Hardy, Adam Kelsall, Adrian Leftman, Chris Maierhofer, Craig Meinicke, Chris Panozzo, Jared Rando, Matt Rousu, Adam Samuelson, Olive Tutt, Ryan Walsch, Zoe Wilson, Hayden Wright

PHOTO GURUS
Anna Beck, Martin Bissig, Mike Blewitt, Clancy Kelly, Gerard Lagana, Cam Mackenzie, Chris Maierhofer, Beardy McBeard, Graeme Murray, Fabio Piva, Jordan Riddle, Matt Rousu, Adam Samuelson, Nick Waygood, Hayden Wright

ADVERTISING
National Advertising Manager
Ash Munro
ash@adventureentertainment.com
+61 402 14 88 66

Publisher Toby-Ryston Pratt

Founder & CEO
Adventure Entertainment.
ABN: 79 612 294 569

Subscriptions
E: magazines@adventureentertainment.com
P: +61 2 8227 6486
PO Box 161, Hornsby, NSW, 1630

ADVENTURE
ENTERTAINMENT

AMB (AUSTRALIAN MOUNTAIN BIKE) is published by Adventure Entertainment Pty Ltd ABN: 79 612 294

© 2025. All rights reserved. No part of this magazine may be reproduced, in whole or in part, without the prior permission of the publisher.

Printed by IVE Group, Sydney, distributed in Australia and New Zealand by Are Direct.

ISSN 1328-6854.

The publisher will not accept responsibility or any liability for the correctness of information or opinions expressed in the publication. All material submitted is at the owner's risk and, while every care will be taken Adventure Entertainment does not accept liability for loss or damage.

PEFC
PEFC/21-31-119
PEFC Certified
Paper from sustainably managed forests and controlled sources
pefcaustralia.org.au

PRIVACY POLICY
We value the integrity of your personal information. If you provide personal information through your participation in any competitions, surveys or offers featured in this issue of AMB, this will be used to provide the products or services that you have requested and to improve the content of our magazines. Your details may be provided to third parties who assist us in this purpose. In the event of organisations providing prizes or offers to our readers, we may pass your details on to them. From time to time, we may use the information you provide us to inform you of other products, services and events our company has to offer. We may also give your information to other organisations which may use it to inform you about their products, services and events, unless you tell us not to do so. You are welcome to access the information that we hold about you by getting in touch with our privacy officer, who can be contacted at Adventure Entertainment.

editorial

IN SEARCH OF ADVENTURE

WORDS ANNA BECK

Remember being a kid? An hour could feel like a year, and the concept of a full year… completely unfathomable.

As I get a little older each year, time seems to speed up. The COVID-19 pandemic was last year, wasn't it?

It's hard to believe that in the five years since the pandemic, the landscape of mountain biking in Australia has shifted so dramatically. We saw a huge industry boom – more people on bikes than ever before – followed by the inevitable dip that often trails unchecked growth.

What mountain biking means to mountain bikers has evolved. E-bikes are now a major player, and the face of participation has changed. More riders are pinning on numbers at mass-participation gravel events and social gravity races. Meanwhile, traditional Olympic-format cross-country races and other hardcore disciplines have taken a noticeable hit.

So, what's rising? Adventure and exploration.

A year ago, I joined AMB with a mission to reflect the shifting interests of the average Aussie mountain biker – by focusing on the experience, the story, and the adventure that biking brings. This is my fourth issue at the helm, and the one where I feel we've truly hit our stride in delivering that adventure brief.

Inside, you'll find everything from how to plan the ultimate flashpacking micro-adventure, to a preview of the epic NZ MTB Rally multi-day enduro, a look at Mogo's brand new adventure trail, and even a wild fire-and-ice gravel ride through the Finnish backcountry.

Of course, we're still delivering top-tier tech and know-how – bike reviews, training tips, nutrition, and workshop advice – to help you get the most out of yourself and your machine.

I was so inspired by the stories in this issue that I even saddled up for an overnight flashpack myself during production – and signed myself up for a cross country marathon and an enduro event (pray for AB). I'll report back in the next issue…

For now, kick back with Issue #213, and start planning your next great escape.

Keep cool!

AB

ADVENTURE LIKE WE DO!
WILD EARTH
LIVE | LIFE | ADVENTURE
EXPLORE NOW

Photo Credit: @_kayleighbrown
Featuring: James Gibson

GEAR UP WITH WILDEARTH.COM.AU
BIGGEST RANGE, BEST BRANDS, UNRIVALLED SERVICE!

Certified B Corporation
This company meets high standards of social and environmental impact.

BLUE DERBY CELEBRATES 10 YEARS, LAUNCHES NEW TRAIL!

Blue Derby has officially launched its latest trail, 333 (or triple 3), a 1.4km descent designed to challenge experienced riders with a mix of speed, technical sections, and signature Derby granite features.

Built with funds from the Shimano Trail Born initiative and executed by World Trail in partnership with the Blue Derby network, 333 is pitched as a progression-focused trail that blends natural features with precision-built elements. The launch coincided with the 10 year anniversary of Blue Derby in April, drawing strong rider interest, confirming Derby's ongoing evolution as a leading mountain biking destination.

With its name a nod to its length and triple-threat design – flow, tech, and speed – 333 is already being touted as one of the most dynamic additions to the network in recent years.

Photos: Beardy McBeard

Blue Derby
Triple 3

SINGLESPEEDERS TAKE ON THE NATIONALS CAPITAL

Two hundred singlespeeders met in the Nation's Capital over the ANZAC day long weekend. Hosted by the Bottles and Chain Federal Division, singlespeeders enjoyed singletrack social rides, an unsanctioned urban hill climb up a multi level car park, DJs, a stein holding competition, a bike box regatta and more than a few tinnies.

National Champions Lizanne Wilmot and Jett Beck were the finest finishers of a gruelling Stromlo course and a mountain bike crit race with a beer shortcut – everyone else did very well. The after party at the old Canberra Inn was possibly the greatest in living memory and the champions trophies were cog tattoos, inked on the bar table while tunes pumped from a cargo bike soundsystem.

2026 hosting rights were awarded to Newcastle in a one all decider with fine representations put in by Margaret River and Major's Creek. If you don't need gears to have a good time, then keep an eye out for details on Singlespeed Nats in the Steel City, 2026.

Words and Images: Adam Samuelson

HARTLEY'S TO PORT 40KM RACE RETURNS FOR 2025

The Hartley's to Port 40km mountain bike race returns in 2025 on Saturday 13th September as a dirty addition to the Port Douglas Gran Fondo Festival. This event departs from Hartley's Crocodile Adventures and heads straight into a 5km climb on Quaid rd, with an average gradient of 8.5% – ouch!

The event features trails that are closed for public use, and finishes the greatest finishing straight of any bike race: straight up the sands of the iconic Four Mile Beach in Port Douglas.

For those who love a lung-busting effort, there will be overall prizes as well as a prize for the fastest up Quaid rd. Fancy yourself a multisport athlete? The Festival also features a half marathon distance run as well as a range of road cycling Gran Fondo events.

For more information head to *portdouglasgranfondo.com.au*

MT TUMBARUMBA MOUNTAIN BIKE PARK OFFICIALLY OPENS IN SNOWY VALLEYS, NSW

Adventure tourism in the Snowy Valleys receives a major boost with the official opening of the Mt Tumbarumba Mountain Bike Park on 29 March 2025. The park opens to the public from 31 March and features 22km of gravity-focused trails, 315m elevation, a 6km climbing trail, shuttle service, and an 8km alpine hiking loop.

Australia's first community-owned and operated bike park, the project was born from resilience after the 2019 bushfires. Funded by a $3.4 million Black Summer Bushfire Recovery Grant and $141,000 in grassroots fundraising – including donated cows auctioned by local farmers – the initiative transformed fire-damaged land into a world-class facility.

Club president Peter Marshall called the park "a story of resilience, determination, and the power of community." Beyond mountain biking, Tumbarumba offers a full adventure tourism experience with fly fishing, cross-country cycling, and award-winning local food and wine.

Federal MPs Kristy McBain and Michael McCormack praised the project for its economic and community impact. The park reinforces Southern NSW as a premier riding destination, with a pay-to-ride model supporting future trail development.

Photos: Andy Hardy
mttumbarumba.com.au

SEA OTTER GEARS UP FOR A HUGE FESTIVAL OF MOUNTAIN BIKING!

Sea Otter Australia, the world's premier bike festival, is set to make its Southern Hemisphere debut in Batemans Bay and Mogo Trails from October 24–26, 2025, brought to you by the now South Coast local events promoter Rocky Trail Entertainment. This five-day cycling extravaganza will create the most immersive mountain bike and cycling festival in Australia, by bringing the World's biggest bike festival brand with a 30-year history to Australia.

The festival will feature 8 official events, from hardcore gravity enduro and epic marathons, to junior racing and a Rocky Trail Superflow on Mogo Trails. Sea Otter will launch e-bike four cross racing, cyclocross beach battles, and jaw-dropping freestyle jams right in and around the event centre! The Event Hub is the beating heart of it all – a rider's paradise with 150+ brands showcasing the latest gear, demo rides, exclusive deals and offers free access and activities for younger children. Visit seaotter.au for all the details and to sign up!

Photos: Josh Firth, KI Photo Media

PROJECT MOSHY: BLACK PEARL CONQUERED!

The Quad Crown Black Pearl race took place from March 7–9, with the experienced Quad Crown crew making a quick pivot from their planned race location as inclement weather saw the Glenbrook trails ditched for the nearby Whitebridge trail network for the prologue and Stage Two, while Stage One took place as planned at the Awaba trail network.

For those playing along at home, our Canberra correspondent Ben 'Moshy' Morrison has been our guinea pig in our Project Moshy series, as we transform our e-biking, downhill wizard into a lean, mean cross-country machine. We checked in with Moshy about his experience.

On Friday morning, I drove to Newcastle, and there weren't good signs on the way up: it was raining heavily from Sydney. When I arrived, I got out of the car into what felt like a million percent humidity compared to Canberra's hot and dry heat, but the dirt was amazing!

The prologue was moved from Glenrock to Whitebridge because of the rain – a quick, clever move from the Quad Crown team. It was really good to do a little sighting lap in the warm-up, and the dirt was awesome. Upon finishing, I think everybody looked at each other and was like, 'That's the hardest thing I've done!'

We got ready for the next day at Awaba, which I've ridden before, but not for a very long time – and I wasn't on a downhill bike this time! I knew that the trail conditions were going to be wet; I knew that it would still be really quite fast and grippy. But I wasn't prepared for just how wet it was going to be.

I was super thankful to have Smith glasses with a transition lens that day, because the sun was out when we left but then we headed into the dark trees. We got covered in mud; there were huge puddles and copious amounts of water. My feet were waterlogged all day.

Despite the mud, my Pirelli race tyres worked out fine. If I'm honest,

WHICH ONE WILL YOU DO?

GRAVITY EDEN TRAILS, NSW
SEPT 12 - 14

THE ORCA

WILD MERSEY TRAILS, TAS
OCT 31 - NOV 2

THE WILD PENGUIN

REGISTRATIONS NOW OPEN!

WWW.QUADCROWNMTB.COM.AU
@QUADCROWNMTB

QUAD EVENTS
AUSTRALIA

there were no issues with grip because it's so sandy out there.

In terms of nutrition, I ate a lot of sand! But actually, I was thinking about this before – and if I didn't have something like Pure's high-carb race fuel, I think I would've really struggled. I had two bottles on my bike for the 30 km; I just knew I needed to get nutrition into me. Fuelling was definitely made easier by using liquid products.

The bike held up exceptionally well, but something that caught me off guard was having no brake pads left. I didn't damage the brakes or the rotors, but I needed a fresh set of pads in the rear and a brake bleed before Stage Two.

For the final day of racing, the sun came out and we finally had cracking conditions. It wasn't too hot or too cold. We rode into Whitebridge again in a group via closed roads, then straight into the singletrack.

Again, I finished in third in my category for that stage, and that put me in third for the overall.

The vibe of the Quad Crown events is supreme. Even on the Saturday when it was bucketing down with rain, people weren't in an absolute rush to get out of there. The results were online straight away; the team knew exactly how to run an event smoothly. The ability of the Quad Crown team to pivot and move the prologue to a new destination was really efficient.

The best part of the Black Pearl – aside from racing – was finishing at the pub. Everyone was there having lunch, sharing stories, and chatting. There was a really good community vibe, heaps of kids, and heaps of dogs at the finish of Stage Two, because finally the weather was nice.

So what are you waiting for? The next Quad Crown race is the Orca in Eden, September 12–14. Check out more details and sign up at *www.quadcrownmtb.com.au*

Photos: Quad Crown

New Products

You know what they say, new gear, new you. Here's a look at some fresh bits landing in Australia.

FIZIK PROXY AND FEROX CARBON

Fizik have announced two new shoe releases, the Proxy and Ferox Carbon. The Proxy featured an X3 carbon reinforced and rubber outsole with a stiffness index of 8, a PU laminated mesh upper for breathability, and a single BOA dial. The Proxy is available in light lilac/lime and black, weighing in at 326g (half pair).

The Ferox Carbon is Fizik's offroad race shoe, featuring the same lightweight mesh upper as the Proxy but with a powerstrap additional to a BOA, as well as a X1 carbon sole for a stiffness index of 10. At 297g they are poised to get you up the climb quickly, available in aubergine hue of mud grape.

Fizik Proxy RRP $379.95
Fizik Ferox Carbon RRP $469.95
advancedtraders.com.au

fi'zi:k
BOA
fi'zi:k

WAHOO ELEMNT BOLT 3 AND ROAM 3

Wahoo have added to their stable, releasing updates to their Roam and Bolt computers. The two updated computers have an updated interface that initially launched on the Wahoo Ace, as well as a host of other features. Check out our comparison review of the range in the Hub.

Element Bolt 3 RRP: $529.95
Elemnt Roam 3 RRP: $749.95
fesports.com.au

wahoo
12:31 87°
86%
PAUSE
PAGE
wahoo
12:31
86%
PAUSE
PAGE

PURE FLUID ENERGY APPLE PIE

Pure have released a new flavour of their Fluid Energy Gel, Apple Pie. With 30g of carbohydrate in one gel, and a palatable mouth feel with a kick of cinnamon spice, there's no better way to enjoy the pleasure and pain of hill climb repeats on the bike.

RRP $3.99 or $69.99 for a box of 18
puresportsnutrition.com

DURING EXERCISE
PURE
SPORTS NUTRITION
APPLE PIE FLAVOUR
WITH REAL APPLE & CINNAMON
FLUID ENERGY
GEL
30g CARBS
50g

FUNN RIPPER V2 PEDALS

Funn's Ripper2 pedals are designed to excel in aggressive Enduro and downhill terrain, while remaining lightweight for all-day trail riding. Featuring an SPD-compatible angular engagement mechanism that tilts up to 15 degrees, it ensures smooth cleat engagement. Available in double-sided clips for consistent engagement or single-sided clips with a flat platform, the Ripper2 adapts to your style, offering confidence and control on any trail.

Single side RRP $229.95
Double side RRP $239.95
funnmtb.com

SHIMANO XTR DI2

The launch of Shimano's brand new XTR Di2 groupset is proof that good things come to those who wait. The no-compromise Di2 system delivers Shimano's ultra-precise and lightning-quick electronic shifting capabilities, with increased durability across the range.

With options across the range for cross country, gravity and e-bike applications, as well as two new wheelsets, we are stoked to see Shimano reenter the mountain biking world in a wireless capacity. Check out our first look review article with Ryan on page 104.

bike.shimano.com/en-AU

SMITH PAYROLL HELMET AND DEFY GLASSES

Smith have launched their new Payroll helmet and Defy sunglasses. The Payroll represents Smith's aggressive trail helmet that features both Koroyd and MIPS safety features, their patented VaporFit system as well as 19 vents for breeze. The Payroll is optimised for eyewear storage on the front.

The Defy glasses are a lightweight, rimless design that feature Smith's Chromapop lens. They not only look cool, they provide 100% protection from harmful UVA/B/C rays. Keep an eye out for an upcoming review on these new offerings from Smith.

Payroll RRP $295
Defy RRP $225

FOX UNVEILS NEW 34 SL: A LIGHTER, LONGER-TRAVEL FORK FOR TECHNICAL XC

Fox has introduced the all-new 34 SL, a 130mm-capable cross-country fork built to meet the rising demand for more capable short-travel suspension. Evolving from the 34 Step-Cast, the 34 SL features a full 34mm chassis, a larger-volume air spring, and adjustable travel from 110–130mm – all while keeping weight impressively low at just 1475g (29" GRIP SL).
Key upgrades include a 17% increase in torsional stiffness, a redesigned 7000-series aluminum crown, improved bushing overlap for better tracking, and new inboard bypass channels for smoother small-bump compliance. Two damper options – GRIP SL for race-focused efficiency and GRIP X for added technical capability – round out the package. With pricing from AU$1149–$1899, the 34 SL delivers XC performance with trail-ready versatility.

FOX LAUNCHES ALL-NEW 36 & 36 SL: EVOLUTION, NOT REVOLUTION

Fox has unveiled the next generation of its iconic 36 fork, introducing both the updated 36 and the all-new, lightweight 36 SL. Designed for aggressive trail and all-mountain riding, the 36 now features a stiffer chassis (with 20% increase in torsional stiffness), the new FLOAT Glidecore air spring for ultra-smooth travel, and refined GRIP X and X2 dampers for enhanced traction and adjustability.
Meanwhile, the 36 SL delivers similar performance in a leaner package – starting at just 1755g – making it a top contender for riders seeking stiffness and control without extra bulk. With travel options ranging from 120–160mm across both models, extended bushing overlap, and reworked arch and crown designs, these forks represent a refined evolution of Fox's proven formula. Available from March 26, 2025, and priced from AU$1199–$1999, the 36 and 36 SL offer cutting-edge performance for riders looking to push the limits on any trail.

ridefoxaustralia.com.au

GET OVER $100 WORTH OF MTB GEAR

WHEN YOU SUBSCRIBE TO AMB FOR 2 YEARS (OR MORE)

SUBSCRIBE TO AMB FOR 2 YEARS OR MORE AND SCORE YOURSELF 8-12 ISSUES OF THE MAGAZINE AND OVER $100 WORTH OF FREE MOUNTAIN BIKE GEAR FROM CLEANSKIN AND MTB DIRECT! THAT'S OVER $200 WORTH OF VALUE FOR JUST $89.95

THE MOUNTAIN BIKE GEAR BUNDLE IS LOADED WITH SOME GREAT ACCESSORIES TO ELEVATE YOUR RIDE! ENJOY A QUIETER, SMOOTHER EXPERIENCE WITH THE CLEANSKIN HUSH CHAINSTAY PROTECTOR, KEEP YOUR SPACE TIDY WITH THE COMPACT HINGE WALL BIKE HANGER, STORE YOUR ON-THE-GO ESSENTIALS IN THE CLEANSKIN STASH FRAME BAG, AND KEEP ON TOP OF YOUR SUSPENSION WITH THE CLEANSKIN ANALOGUE SHOCK PUMP.

MTB DIRECT

Tested: TREK RAIL+, SPECIALIZED TURBO LEVO, SANTA CRUZ HIGHTOWER
AUSTRALIAN MOUNTAIN BIKE
AMB
FIRST RIDE ON NEW SHIMANO XTR DI2
CHOOSE YOUR OWN
ADVENTURE
CHASING THE NORTHERN LIGHTS A GRAVEL ADVENTURE IN FINLAND
RIDING MOGO'S NEW ADVENTURE TRAIL
THE MTB REVOLUTION IN SCHOOLS

SUBSCRIBE:

3 YEARS - 12 ISSUES

$125- (SAVE $42.40)

2 YEARS - 8 ISSUES

$89.95- ($21.65)

1 YEAR - 4 ISSUES

$49.95 - (SAVE $5.85)

- **NEVER MISS AN ISSUE**
- **GET FREE DELIVERY TO YOUR DOOR**
- **GREAT GIFT IDEA**
- **CHEAPER THAN BUYING AT RETAIL OUTLETS (SAVE UP TO SAVE $42.40 ON A 3 YEAR SUBSCRIPTION)**

AUSTRALIAN MOUNTAIN BIKE

AMB

cleanskin
cleanskin
cleanskin

GEAR WORTH $100+

OFFER AVAILABLE FOR AUSTRALIAN AND NEW ZEALAND RESIDENTS ONLY. FOR FULL TERMS & CONDITIONS, HEAD TO **SUBSCRIBE.AMBMAG.COM.AU**

SUBSCRIBE AT

@ ONLINE subscribe.ambmag.com.au

☎ OR CALL +61 (2) 8227 6486

✉ OR MAIL PO Box 161, Hornsby
NSW 1630, Australia

SCAN TO SUBSCRIBE!

PLEASE SEND ME A SUBSCRIPTION TO: **AMB**

☐ 3 Years - 12 Issues - **$125** - **SAVE $42.40**
☐ 2 Years - 8 Issues - **$89.95** - **SAVE $21.65**
☐ 1 Year - 4 Issues - **$49.95** - **SAVE $5.85** (no free gift)
☐ Gift subscription ☐ New Subcription ☐ Renewal

MY DETAILS

Name: Mr /Mrs / Miss / Ms

Address:

Postcode:

Daytime phone:

E-mail address:

please provide phone or email in case of delivery issues

PAYMENT:

I enclose cheque/money order for $__________
payable to Adventure Entertainment Pty Ltd

or please charge my ☐ Mastercard ☐ Visa ☐ Amex

No. ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐

Expiry: / Name on card:

Cardholders signature:

GIFT RECIPIENT'S DETAILS:

Name: Mr /Mrs / Miss / Ms

Address:

Postcode

Daytime phone:

Offer available for Australian and New Zealand residents only. Rates inc GST. For international rates visit our website. Subscriptions commence with the next issue to be mailed, please allow minimum 8 weeks for delivery. This form may be used as a Tax Invoice. The Promoter is Adventure Entertainment Pty Limited. Our full Privacy Notice can be found at www.adventureentertainment.com.au. Please tick if you do not wish to receive special offers or information from Adventure Entertainment or its partners via [ ] mail [ ] email or [ ] phone. If you prefer to receive your communication electronically, please ensure we have your current email address.

CALENDAR

Got an event to feature in the calendar?
Email us at Anna@ adventure entertainment.com

XC/XCM AND THE REST

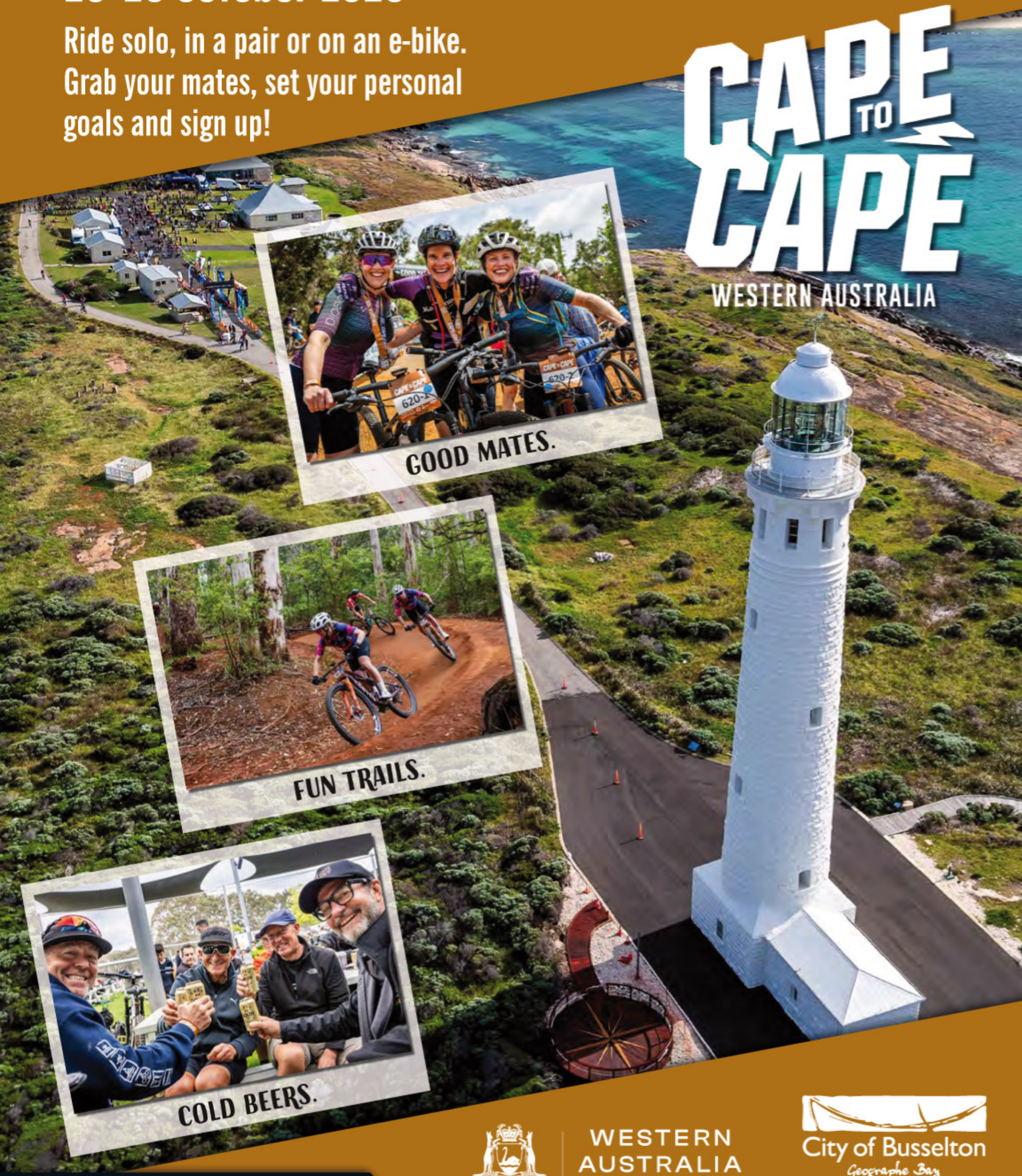
14-15 June	**NSW/ACT XCO State Series 2**	Hunter Valley, NSW	auscycling.org.au
4-6 July	**Y2W: The Brisbane Valley Rail Trail Adventure**	Ipswich, QLD	bq.org.au
5-6 July	**NSW/ACT XCO State Series 3**	Mogo, NSW	auscycling.org.au
5 July	**Collie River Marathon**	Collie, WA	auscycling.org.au
24-27 July	**Reef to Reef**	Cairns, QLD	reeftoreefmtb.com
9-11 August	**NSW/ACT XCO State Series 4**	Tamworth, NSW	auscycling.org.au
23-24 August	**2025 AusCycling MTB Marathon National Championships**	Melrose, SA	auscycling.org.au
30-31 August	**NSW/ACT XCO State Series 5**	Southern Highlands, NSW	auscycling.org.au
13 September	**Dwellingup 100**	Dwellingup, WA	dwellingup100.com.au

GRAVITY

14-15 June	**WA Gravity Enduro 4**	Nannup, WA	wagravityenduro.org
20-22 June	**NSW State Gravity Series 2025 Round 2**	Stromlo, ACT	auscycling.org.au
23 June	**Outlaw Downhill Round 4**	Hidden Vale	ontheedgeevents.com.au
28-29 June	**WA Downhill State Series Round 5**	Ferguson, WA	auscycling.org.au
6 July	**Gravity Enduro SA Club Series Round 3**	TBC, SA	auscycling.org.au
12-13 July	**WA Gravity Enduro 5**	Geraldton, WA	wagravityenduro.org
19-20 July	**Inside Line Downhill State Series SA Round 3**	TBC, SA	insideline.com.au
26-27 July	**WA Downhill State Series Round 6**	Dwellingup, WA	auscycling.org.au
28 July	**Outlaw Downhill Round 5**	Mt Joyce, QLD	ontheedgeevents.com.au
9-10 August	**WA Gravity Enduro Round 6**	Dwellingup, WA	wagravityenduro.org
9-10 August	**Inside Line Downhill State Series SA Round 4**	TBC, SA	auscycling.org.au
23-24 August	**WA Downhill State Series Round 6**	Nannup, WA	auscycling.org.au
23 August	**2025 AusCycling Mountain Bike Downhill State Championships NSW/ACT**	Greenvalleys, NSW	auscycling.org.au
23 August	**2025 AusCycling NSW/ACT Gravity Series Round 3 DH**	Greenvalleys, NSW	auscycling.org.au
31 August	**Gravity Enduro SA Club Series Round 4**	SA	auscycling.org.au
31 August	**Renegade Gravity Enduro Series 4**	Mt Cotton, QLD	ontheedgeevents.com.au
6-7 September	**QLD Gravity Enduro State Championships**	Townsville, QLD	auscycling.org.au

16-19 October 2025

Ride solo, in a pair or on an e-bike. Grab your mates, set your personal goals and sign up!


CAPE TO CAPE
WESTERN AUSTRALIA
GOOD MATES.
FUN TRAILS.
COLD BEERS.

REGISTER NOW

GOVERNMENT OF WESTERN AUSTRALIA

WESTERN AUSTRALIA
WALKING ON A DREAM

City of Busselton
Geographe Bay

SHIRE OF AUGUSTA MARGARET RIVER

Shire of Nannup
rest • connect • grow

EXPERIENCE NANNUP

X-factor

PRESERVING MOUNTAIN BIKING'S WILD HEART

WORDS ELLA BLOOR / PHOTO GRAEME MURRAY, RED BULL

It's undeniable: a fast, fun, predictable, perfectly sculpted trail is a lot of fun. Maybe you're in a train of mates, all 'yeewwww-ing' your way down, or maybe you're new to the sport, learning how a bike feels over rollers and around berms, with a freeway of width to accommodate your developing skills. Then, in contrast, there's the old-school, raw trail, often gnarlier, slower, and demanding precision as you edge your way down. You hold your breath down a janky, rocky garden and survive it. The adrenaline of making it down alive is unforgettable.

Both have their place, but with the influx of sculpted, sanitised, bike-park-style trails across Australia, is the wild side of mountain biking being left behind?

Over the past decade, we've seen exponential growth in government investment in mountain biking, driven by the benefits to regional tourism, economic diversification, and community wellbeing. With this has come a boom in trail-building businesses, such as World Trail, well known for bringing to life the iconic trail networks of Derby, Falls Creek, St Helens, and Mount Buller. Other respected outfits, like Trailscapes, Dirt Art, and Contour Works, are also shaping Australia's growing mountain biking landscape.

Places like Derby, a former mining town, and Maydena, a tiny forestry settlement, are now recognised globally as thriving mountain biking destinations. These towns have been revitalised by bikes, and that growth is something to genuinely celebrate.

Machine-built flow trails – smooth, sculpted, and berm-heavy – are now the norm in many new networks. They're beginner-friendly, lower-maintenance, and accessible to a wide range of riders. These gentle, rollercoaster-like trails often act as a gateway into the sport, helping new riders build confidence without the intimidation of rocks, roots, or steep descents. Let's be honest, we've all walked down a section that was a bit too far above our pay grade, and that 'walk of shame' doesn't exactly feel like fun. Berms, on the other hand? Always fun.

The rise of flow trails has absolutely been a good thing for accessibility and growth. But what are we losing? Raw, natural trails, full of roots, ruts, off-camber corners, loose rocks, and unpredictable lines, teach bike handling in a way that groomed trails never can. Riders raised solely on sculpted terrain may miss key foundational skills: how to read complex terrain, modulate braking on changing surfaces, and move dynamically over irregular ground. Confidence builds quickly on flow trails, but that confidence can easily outpace technical ability – especially when speed is so easily gained but not always skillfully managed.

Anyone who's ridden a handful of these new networks has likely noticed a creeping sense of sameness. Despite the varying landscapes, many of these trail systems begin to feel homogenised, designed to a familiar 'flow-trail' formula, with less variation and fewer surprises.

That's why balance is key.

A healthy trail network should offer both sculpted and raw experiences, and listen to what the local community actually wants. Community input matters. Trail plans should aim for diversity and progression, not just in difficulty, but in trail character. It's nearly impossible to build trails that cater to everyone, but credit goes to the trail builders who try. The best builders are those who evolve with the sport, creating opportunities for new riders without erasing the challenge that experienced riders still seek.

There's an art to building flow without sterilising everything, and it's not easy to blend machine-built precision with the unpredictability of natural terrain.

Mountain biking is a broad, evolving discipline. It's so much more than just gnar for the purists, but we should still ask ourselves: What kind of rider do you want to be? When was the last time you felt a little out of control… in a good way? Maybe it's time to seek out the trails that make you a little uncomfortable.

NVR LOST
MTB APPAREL

ELEVATE YOUR RIDE.

MOUNTAIN
BIKE CLOTHING.
REVOLUTIONISED.

Every piece of our mountain bike clothing is carefully designed with your ride in mind.

Immersed in the community, we constantly develop and test innovative products to improve your riding experience. Blending comfort and style with technical features to make your journey both easy and enjoyable.

@NVRLOST_MTB
WWW.NVRLOST.COM.AU

Riders threading the pines of Mystic Mountain Bike Park, which has recently moved to a pay-to-ride model

Trail talk

THE CHALLENGES OF TRANSITIONING TO PAY-TO-RIDE

WORDS CRAIG MEINICKE / PHOTO NICK WAYGOOD

In Issue 212 I discussed pay-to-ride trail networks, and why shifting towards this model leads to better outcomes for riders, the environment and communities more broadly. But as when shifting towards a new model of operation, there are always disadvantages. In this piece, I'll discuss some of the downsides and challenges of the pay-to-ride model, and offer a few ways in which these can be overcome. Because despite its advantages, the pay-to-ride model does come with a unique set of challenges, particularly within communities where many riders are accustomed to free access to trails and feel a sense of ownership over the terrain.

1. **Resistance from Riders**
   The idea of paying for access to trails often sparks debate, particularly from riders who have historically enjoyed free trails and may view fees as unfair or exclusionary. Communicating the necessity of these fees, and the tangible benefits they deliver, is essential to gaining widespread support.

2. **Equity and Accessibility**
   Pay-to-ride systems may unintentionally exclude lower-income riders who cannot afford access fees. To address this, some trail networks may offer discounted rates, family passes, or free access on certain days to ensure the trails remain inclusive.

3. **Administrative Costs**
   Implementing a pay-to-ride system requires infrastructure, such as ticketing systems, payment gateways, and enforcement mechanisms. These costs can eat into initial revenue, making it crucial for trail managers to carefully plan their budgets and operations.

4. **Balancing Public and Private Interests**
   Many mountain bike trails are located on public land, which complicates the implementation of entry fees. Trail managers must work closely with government agencies, landowners, and stakeholders to navigate the legal and logistical challenges of introducing a pay-to-ride system.

A Shared Journey

For a pay-to-ride model to succeed, transparency and communication is key. Riders need to understand and have visibility of how their fees are being used, whether it's for maintaining existing trails, building new ones, or improving facilities. Clear signage, regular updates, and community engagement can help build trust and foster a sense of ownership among riders.

Hybrid models also offer a potential middle ground. For example, trail networks could maintain free access to a portion of their trails while charging fees for premium sections or offering optional memberships with added perks. Collaborating with local and state governments to secure subsidies or grants could further alleviate costs for riders.

A Sustainable Future

As mountain biking continues to grow in popularity, the need for well-maintained, sustainable trail networks becomes more urgent. While the pay-to-ride model may not be universally embraced, it offers a promising solution to the challenges of funding and managing trail infrastructure. By striking a balance between accessibility and sustainability, the mountain biking community can ensure that Australia's trails remain world-class for generations to come.

After all, investing in our trails is an investment in the future of the sport we all love.

Happy trails!

Craig Meinicke is the founder of Blue Sky Trails a trail consulting business, and Trail Vision, a software business for best practice trail management.

wahoo

The next generation of ELEMNT is here.

Just Ride.

Ride Fast

ELEMNT BOLT

Compact. Aero. Essential.

Ride Big

ELEMNT ROAM

Powerful. Rugged. Adventure-Ready.

Ride Epic

ELEMNT ACE

Big. Bold. Built For Everything.

Proudly distributed by FESPORTS

DISCOVER MORE AT FESPORTS.COM.AU

Dan Booker taking flight during Red Bull Hardline earlier this year

Gravity Check

980M: A RECIPE FOR SUCCESS?

WORDS CHRIS PANOZZO / PHOTO GRAEME MURRAY, RED BULL

How much can really happen in 980 meters?

That was the question coming into the final stage of Round 1 of the EDR held in Pietra Ligure. With the return to multi-day stage racing, the EDR's hopes seem destined to rest upon a nostalgic return to what made the sport so popular to begin with. But the question remained: will anyone be watching after two long days, finishing with a 7th and final stage consisting of 980 meters with a vertical drop of 147 meters? Was this really the formula to bring the sport back to the masses?

The winning average speed of that final stage was 26.9km/h, that's a full 237.4 km/h slower than Oscar Piastri's latest F1 pole lap, and while that might seem unfair to compare, the feats by the two Australian athletes who achieved them are equal in measure. Oscar's speed in the car was matched by none other than Dan Booker on the bike. Heading into the final stage of the weekend, the Tasmanian riding as a supported, but in effect privateer, put everything on the line after 41 minutes of combined racing to have the fastest 2 minutes of his life, coming out ahead by 0.374 seconds and with it his first World Cup Win.

Coming into that final ranked 2nd overall, managing the pressure to chase down a win by the narrowest of margins in what looked to be a very physically demanding race – on flat pedals no less – should have been front page news across the cycling world, drawing parallels to the might of Sam Hill separating himself from his competitors with his speed and choice of shoe.

Unfortunately for the charismatic, laid-back Tasmanian, his heroics have been passed by nearly as fast as those 980 meters. For those who still follow the sport, it was noticed, but it›s a sign of the times that a win of this magnitude hasn't registered more broadly among fans and media alike. I'm sure Dan and the whole of Australia will remember this day. Let›s hope the rest of the cycling world does, too.

Continental
The Future in Motion

GRIP TO PUSH YOUR LIMITS

THE CONTINENTAL GRAVITY RANGE.
Grip begins with engineering at a molecular level. New compounds formed into cutting edge tread, laid onto a supple carcass. Innovation, driven by science, has created five cutting edge treads for gravity fuelled riders. **The Science of Grip.**

GRIPOLOGY
EST TRAILS ROCK MUD 1871
CONTINENTAL

@conti_mtb @contibike_au

Mind Body Bike

HOW CAN IMAGINING THE UNIMAGINABLE MAKE YOU RIDE FASTER?

WORDS **DR KATH BICKNELL** PHOTO **FABIO PIVA / RED BULL**

A massively under-discussed element of riding well is how we use our imagination. We can't always see the trail ahead, but we use information from what we do know to predict and imagine what might lie ahead. Mud here means the likeliness of mud elsewhere and what characteristics it's likely to have. Having a good look at a drop or jump on one run helps us hold its features in our minds when we hit it on the next run. Visualisation might get us most of the way there if we've seen something before but our imaginations allow us to fill in some of the gaps.

Have you ever let your imagination go a few steps further and found that your riding benefited from something that's not actually true? Like imagining you're riding a world champs winning run? Or thinking something disastrous might happen if you don't get to the top of a hill? (Not recommended, but a lot of people confess to doing this.) Or that if you ride faster, you can get home before those huge dark clouds become heavy rain?

During a climb to a favourite local descent recently, my friends and I started talking about a viral video of Natasha Bradley's topless run at the 2025 McGazza Fest in Queenstown. Beyond the discussion about how smooth her skills were (and why that wasn't enough to get 82.5 million views with her jersey on) and our thoughts on topless runs in general, two questions stuck with me as we turned from the climb to the flowy, jumpy, slightly chewed-up descent. How much would a topless run hurt? And what long-term damage might it cause?

My imagination turned to what it would be like riding here and now without one of my most fundamental pieces of riding kit: my Serena Williams-endorsed Berlei maximum bounce protection sports bra.

As I rode this track, imagining the practicalities of a topless run, I found myself picking the smoothest lines I could so as not to cause my boobs to bounce wildly, hurt like crazy, and potentially stretch beyond their ability to stretch back. I picked high lines into corners to stay out of braking ruts. I was smoother than I've ever been on all the jumps. I moved my torso with a fluidity I've never concentrated on before.

Partway through the descent, my thoughts switched to the practicalities of what it would be like to film the rider in front of me, as if it was her doing this topless run. Knowing that she wouldn't be keen to repeat this feat again (or ever), I did everything I could to keep her in sight of the imaginary camera I was using to film this imaginary run. I can rarely hold this rider's wheel on this track, but on this occasion, I could.

After we finished our ride, Strava let me know that I'd beaten my previous time on this trail by a whopping 30 seconds. I didn't ride faster by buying a new bike, changing my tires, or reminding myself of each small thing I needed to do to ride the trail with more speed. I rode faster by unintentionally focusing on a profoundly feminine cue. One overarching thought helped to coordinate a whole series of actions in a different-to-normal way: line choice, torso movement, the rider ahead, protecting the girls, smoothness at all costs.

People sometimes talk about how distracting themselves from the task at hand is what helps them ride faster. But this imagined scenario wasn't simply a case of distraction. It was one point of focus that united several others. A way of keeping the cognitive load novel and simple while supporting a thousand small decisions that increased speed and fluidity on the trail.

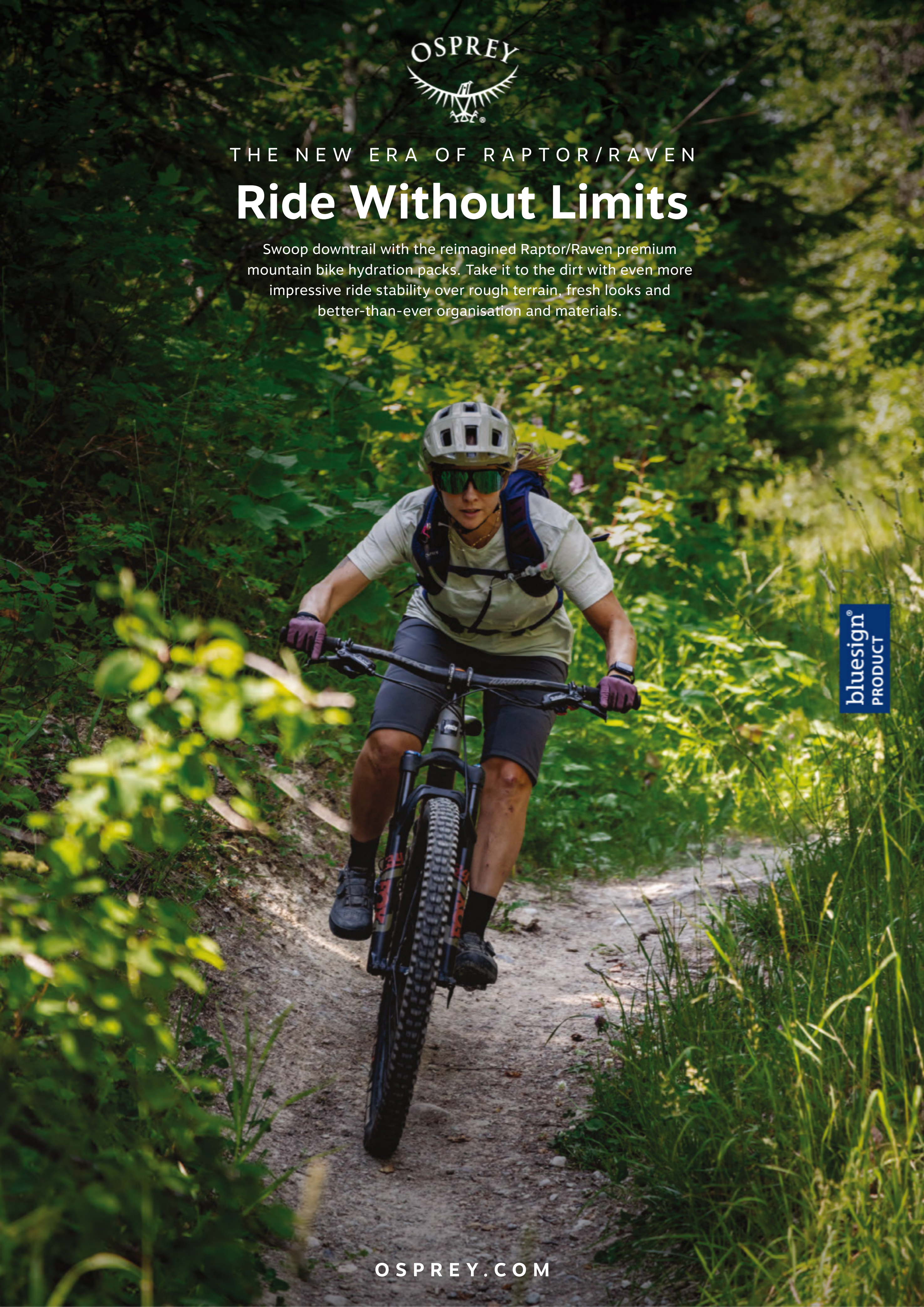
Next time you hit a favourite descent, think about what image you can hold in your mind that helps you ride the way you want to. If a topless run works for you, go for it. I've also heard of riders thinking about how water finds the fastest way down the hill and using that to guide their own approach. Or imagining a sunny day with friends to stamp out the negativity or pressure they might feel when it's miserably cold and there's a timing chip on their number plate.

Play with different images as you ride and be open to being surprised. The best part is, as long as your imagined scenario lines up with a real-life goal you're working on, the thing you think about doesn't even have to be real to give you a performance benefit. Take the benefits further by reflecting on what worked and why afterwards, and see if you can integrate those additional skills into your riding more deliberately in future.

Ed: Please accept this photo of Evie Richards ripping in Brazil as a child-friendly alternative to a pic of the topless run.

Learn more about using your mind to get more out of your time on the bike from Kath Bicknell at:

intelligentaction.cc
@Intelligent_Action
FB: Intelligent Action



OSPREY

THE NEW ERA OF RAPTOR/RAVEN

Ride Without Limits

Swoop downtrail with the reimagined Raptor/Raven premium mountain bike hydration packs. Take it to the dirt with even more impressive ride stability over rough terrain, fresh looks and better-than-ever organisation and materials.

bluesign® PRODUCT

OSPREY.COM

WELCOME TO THE
KILKIVAN TO KINGAROY
RAIL TRAIL
KILKIVAN • GOOMERI • MURGON • WONDAI • TINGOORA
WOOROOLIN • MEMERAMBI • CRAWFORD • KINGAROY
QUEENSLAND • AUSTRALIA
MAXXIS

The Big Adventure

11 TIPS FOR ADVENTURE RIDING

AS DISCOVERED DURING AN OVERNIGHT BIKEPACK

WORDS AND PHOTOS CHRIS MAIERHOFER

I was sitting in front of the computer, trying to write a guide on how to start adventure riding for The Big Adventure feature – and I wasn't loving it. It quickly turned into a generic list of do's and don'ts. Sure, it was helpful, but it wasn't exactly a page-turner. I sat, ironically, staring at my computer with this single line staring back at me:

Tip #1: Just start.

You don't need perfect gear, a flawless itinerary, or some far-off exotic location. Just go.

Right then, my phone pinged. A message from a mate – let's call him Bill:

"Heading out Kingaroy way Friday to Sunday. Gordonbrook and Wondai MTB trails Friday, KKRT [Kingaroy to Kilkivan Rail Trail] to Goomeri Pub and back Sunday. $40 each to split a twin room. BYO earplugs..."

It was Thursday. I'd done only a handful of bikepacking trips, but I figured I should take my own advice and go. Actually, I replied something like, "you guys ride Friday, I'll get sorted and meet you Saturday morning in Kingaroy."

Cue the gear scramble. CamelBak? Too heavy. Handlebar bag from my touring bike? Too small. But the front rack off my commuter? Perfect! Add a dry sack from the German supermarket's centre aisle, an old Topeak BackLoader, a 15-year-old bento box, and a mystery frame bag, and voilà – my improvised bikepacking setup was complete (**Tip #2: Use what you have**).

But what bike? My commuter is faster but has no compliance and skinny tyres at high pressure on dirt roads is a recipe for a bad time. The mountain bike it is, while it has fewer hand positions, it's overall far more comfortable then others in my fleet (**Tip #3: Comfort is king...especially on the bum**).

Then, in a bout of overthinking, I swapped the wheels for a set with 35mm rims and 2.4" Maxxis Aspens. Did I need to? No. Did it look cool? Absolutely. (**Tip #4: Don't overthink things**).

On Friday, I received another ping from Bill:

XXXX
GRAND HOTEL
TAKE AWAY

"Might drive to Gordonbrook, ride there. Then drive to Goomeri, ride towards Kingaroy, then back. Sunday: Goomeri to Kilkivan, then Gympie for the Victory trails." (**Tip #5: Be flexible**).

I stuck to my plan – less driving, more riding – and aimed to meet them coming back while I was heading north. We'd do the Kilkivan leg together Sunday morning. It satisfied my inner completionist (**Tip #6: Stick to the plan if it works for you**).

Saturday started with the usual: early drive, coffee hunt, trail roll-out. Barely 500m in, I ran into a friend marshalling for Bicycle Queensland's (BQ) Wondai Gravel event. One of the best things about bikes? You stop and chat. Unlike waving from a car, it's a real connection.

With a mere 66km on the cards, I had time to explore. I diverted through the McEwan State Forest trails and rolled into Wondai. After a stop at the BQ event hub and a supermarket run for snacks, I pushed north (**Tip #7: Allow time to do other things**).

Mid-afternoon: *Ping*!

Uh-oh.

Bill, it turned out, hadn't checked his frame for hairline cracks. The result? The evidence of aluminium fatigue failure sent via text. Luckily, he was in the town of Murgon when it happened. I was just outside town, so I rolled in to find his bike chained outside the pub – and Bill inside, working through a lineup of Murgon's finest lagers. (**Tip #9: Check your frame for hairline cracks and #10: Have a contingency plan**).

The rest of the group had headed back to get a car and rescue Bill and his bike. I kept going and reached Goomeri just as they returned. We laughed (mostly at Bill's expense), had a few drinks, and made a new plan: no Kilkivan ride Sunday. Instead, they'd hit some singletrack a bit further north.

I stuck to my solo mission – back to Kingaroy, via the full KKRT.

Sunday saw an early start, a bakery stop and goodbyes. I rolled out into the cool morning mist, a little nervous about the climbs and trail conditions. The further north you go, the rougher the trail – less sealed, but far more more adventurous.

The early mist gave way to blue skies, and I cruised into Kilkivan mid-morning. Beyond here, the corridor continues but isn't yet open to the public. One day, I hope, for another adventure.

I saw a surprising number of other riders – tourers and day-trippers – which bodes well for the trail's future.

The return was uneventful, but never boring. Rolling pastures, shaded creeks, wildlife, and friendly faces. Those are stories for another time, perhaps under **Tip #8**.

Because, sure, this wasn't the Munda Biddi or Iditarod. But it was a start. And I know one thing for sure, **Tip #11: Experience is the best teacher**.

12 TIPS FOR ADVENTURE RIDING

1. JUST START.
2. USE WHAT YOU HAVE.
3. COMFORT IS KING (ON THE BIKE).
4. DON'T OVERTHINK THINGS!
5. BE FLEXIBLE.
6. STICK TO THE PLAN.
7. ALLOW TIME TO DO THINGS.
8. IT'S ON THE TRAIL
9. CHECK YOUR FRAME FOR HAIRLINE CRACKS.
10. HAVE CONTINGENCIES.
11. EXPERIENCE IS THE BEST TEACHER.

Are you an enthusiastic adventurer on the bike? Perhaps you've ridden all of Canberra's singletrack in 24 hours, or have a tale about a helicopter evacuation that time when things didn't go to plan on your ride? Send it in to anna@adventureentertainment.com, and you may have the chance to feature in The Big Adventure of AMB #214

THE BIG BIKE FILM NIGHT 2025

A CELEBRATION OF STORYTELLING ON TWO WHEELS

There's something about bike movies that hits differently. Maybe it's the way they capture the raw energy of a perfect ride – the kind where every turn flows, every feature feels dialled, and the world melts away into pure movement. Maybe it's how they make you feel the struggle, perfectly capturing the grind of a long ascent, the isolation of an endless bikepacking route, and the heartbreak of a race gone wrong. And maybe, just maybe, it's because watching bikes on the big screen taps into something deeper – a shared passion, a universal understanding between riders that transcends discipline, location, or experience level.

The Big Bike Film Night's Australian tour isn't just about the films – it's about how bikes bring people together. Whether you're a gravity fiend, a gravel grinder, or someone who loves a good Sunday cruise, there's something electric about sitting in a darkened theatre, surrounded by people who share the passion of a life behind (handle) bars. The collective gasps as a rider sends an impossible drop. The murmurs of recognition when someone battles through exhaustion on an ultra-endurance mission. The laughter when a film reminds us that, for all the suffering, biking is still about fun. It's an experience that reminds us that we're part of something bigger – a global community of riders, dreamers, and adventurers, all connected by two wheels.

The Big Bike Film Night is curated by Brett Cotter, and he's been doing this for 11 years now, so he knows a thing or two about showcasing some of the best bike stories worldwide. The 2025 collection promises a diverse lineup, covering everything from high-adrenaline gravel adventures on technically challenging terrain to bikepacking epics that redefine what's possible on two wheels. Expect films that celebrate grit, camaraderie, and the beauty of "Type 2 Fun" – the kind of riding where the suffering is real, but so is the reward.

There are heartwarming stories about the power of simply getting outside, no matter where you are in life, and a film following a group of Wānaka locals on their annual bikepacking trip to a ski resort – an adventure that blends community, exploration, and social change. Another takes us deep into the backcountry of Queenstown, capturing a poetic and meaningful mountain bike journey through one of New Zealand's most stunning landscapes.

But it's not just about the wild terrain, The Big Bike Film Night also showcases the impact bikes can have on people's lives. One standout film follows a group of friends with disabilities undertaking a trip to a bothie (hut) in the Scottish Highlands, proving that adventure is for everyone, regardless of ability. Another reminds us of the beauty of "winging it", highlighting how bicycle travel challenges preconceptions and fosters a deeper understanding of the world around us. And in true Kiwi fashion, one film follows a young rider tackling a grueling six-day mountain bike rally, navigating the highs and lows with an entirely unsupported style – fueled, of course, by chocolate milk.

But what really sets this festival apart is the energy in the room. There's something almost ritualistic about it – grabbing your popcorn, finding a seat, and settling in as the opening credits roll. It's a space where strangers become friends, where you walk in not knowing the people sitting next to you, but by the end of the night, you're swapping stories about your best rides, your dream destinations, and maybe even your next big adventure. Because that's the power of bikes – and of great storytelling. They inspire. They connect. They push us to dream bigger and ride further.

So, if you love bikes (and let's be real, you do), find your nearest screening, grab a ticket, and immerse yourself in the best stories on

two wheels. Whether you leave with an idea for your next big ride or simply an urge to get out and spin the pedals, The Big Bike Film Night will remind you why we ride in the first place. And really, what more could you ask for?

The Big Bike Film Night Australian tour commences in Melbourne, Victoria on Sunday 3rd August and then visits 35 locations across the country, finishing in Albany, Western Australia on Thursday 9th October.

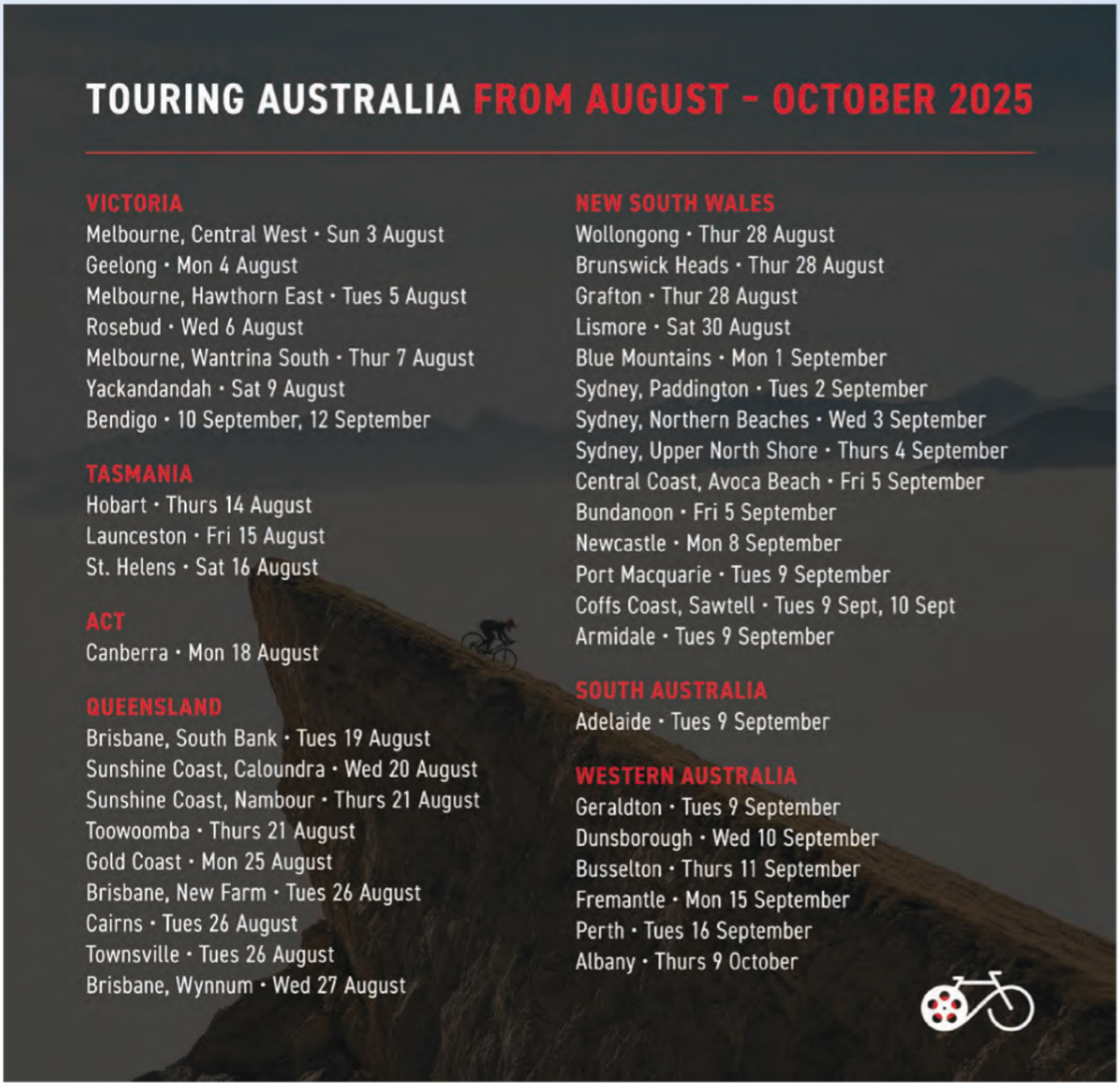
For more information and to buy tickets visit ***www.bigbikefilmnight.nz***

THE BIG BIKE FILM NIGHT COMPETITION: YOUR CHANCE TO WIN BIG

The Big Bike Film Night is also giving bike lovers the chance to win an unforgettable cycling holiday in New Zealand! To enter, all you need to do is purchase a ticket to attend a screening of the Big Bike Film Night in Australia.

Thanks to their Presenting Partner, Ngā Haerenga Great Rides of New Zealand, you could WIN A GREAT RIDES OF NEW ZEALAND HOLIDAY.

For all the details on how to enter, including the competition guidelines, visit Big Bike Film Night's competition page.



TOURING AUSTRALIA FROM AUGUST - OCTOBER 2025

VICTORIA

Melbourne, Central West · Sun 3 August
Geelong · Mon 4 August
Melbourne, Hawthorn East · Tues 5 August
Rosebud · Wed 6 August
Melbourne, Wantrina South · Thur 7 August
Yackandandah · Sat 9 August
Bendigo · 10 September, 12 September

TASMANIA

Hobart · Thurs 14 August
Launceston · Fri 15 August
St. Helens · Sat 16 August

ACT

Canberra · Mon 18 August

QUEENSLAND

Brisbane, South Bank · Tues 19 August
Sunshine Coast, Caloundra · Wed 20 August
Sunshine Coast, Nambour · Thurs 21 August
Toowoomba · Thurs 21 August
Gold Coast · Mon 25 August
Brisbane, New Farm · Tues 26 August
Cairns · Tues 26 August
Townsville · Tues 26 August
Brisbane, Wynnum · Wed 27 August

NEW SOUTH WALES

Wollongong · Thur 28 August
Brunswick Heads · Thur 28 August
Grafton · Thur 28 August
Lismore · Sat 30 August
Blue Mountains · Mon 1 September
Sydney, Paddington · Tues 2 September
Sydney, Northern Beaches · Wed 3 September
Sydney, Upper North Shore · Thurs 4 September
Central Coast, Avoca Beach · Fri 5 September
Bundanoon · Fri 5 September
Newcastle · Mon 8 September
Port Macquarie · Tues 9 September
Coffs Coast, Sawtell · Tues 9 Sept, 10 Sept
Armidale · Tues 9 September

SOUTH AUSTRALIA

Adelaide · Tues 9 September

WESTERN AUSTRALIA

Geraldton · Tues 9 September
Dunsborough · Wed 10 September
Busselton · Thurs 11 September
Fremantle · Mon 15 September
Perth · Tues 16 September
Albany · Thurs 9 October

THE BIG BIKE
FILM NIGHT

Something THRILLING is ready to
REACH THE TOP of the BIG screen

TOURING AUSTRALIA FROM AUGUST – OCTOBER 2025

VICTORIA
Melbourne, Central West · Sun 3 August
Geelong · Mon 4 August
Melbourne, Hawthorn East · Tues 5 August
Rosebud · Wed 6 August
Melbourne, Wantrina South · Thur 7 August
Yackandandah · Sat 9 August
Bendigo · 10 September, 12 September

TASMANIA
Hobart · Thurs 14 August
Launceston · Fri 15 August
St. Helens · Sat 16 August

ACT
Canberra · Mon 18 August

QUEENSLAND
Brisbane, South Bank · Tues 19 August
Sunshine Coast, Caloundra · Wed 20 August
Sunshine Coast, Nambour · Thurs 21 August
Toowoomba · Thurs 21 August
Gold Coast · Mon 25 August
Brisbane, New Farm · Tues 26 August
Cairns · Tues 26 August
Townsville · Tues 26 August
Brisbane, Wynnum · Wed 27 August

NEW SOUTH WALES
Wollongong · Thur 28 August
Brunswick Heads · Thur 28 August
Grafton · Thur 28 August
Lismore · Sat 30 August
Blue Mountains · Mon 1 September
Sydney, Paddington · Tues 2 September
Sydney, Northern Beaches · Wed 3 September
Sydney, Upper North Shore · Thurs 4 September
Central Coast, Avoca Beach · Fri 5 September
Bundanoon · Fri 5 September
Newcastle · Mon 8 September
Port Macquarie · Tues 9 September
Coffs Coast, Sawtell · Tues 9 Sept, 10 Sept
Armidale · Tues 9 September

SOUTH AUSTRALIA
Adelaide · Tues 9 September

WESTERN AUSTRALIA
Geraldton · Tues 9 September
Dunsborough · Wed 10 September
Busselton · Thurs 11 September
Fremantle · Mon 15 September
Perth · Tues 16 September
Albany · Thurs 9 October

SCAN TO VISIT
OUR WEBSITE AND
BOOK YOUR TICKETS!

www.BigBikeFilmNight.nz

PHOTOGRAPHER OF THE YEAR WINS $2000 AND SHIMANO DRIVETRAIN!
OAKLEY
OAKLEY
THE AMB PHOTOGRAPHY AWARDS
PRESENTED BY SHIMANO

2025 AMB PHOTOGRAPHY AWARDS OPEN!

The Shimano AMB Photo Awards are back for 2025 and are bigger and better than ever.

With more than $10,000 in cash and prizes up for grabs across 5 categories, now is the time to gather your best mountain bike photos and videos and submit them to our competition!

Awards will be given to each category winner, with one entrant selected as our Shimano AMB 2025 Photographer of the Year who will take home $2,000 in cash plus a Shimano XT Groupset valued at over $3,000.

We will also be recognising the Shimano Young Photographer of the Year where one photographer under the age of 20 will take home a Shimano Deore Upgrade Kit valued at $1,000.

To help select our winners we need your votes on the best entries! Voting opens on 22 July 2025.

The Shimano AMB Photo Awards are open to entrants from Australia and New Zealand, but photos may be submitted with content from any location worldwide. To be eligible for the Photographer of the Year Award, the winner must submit a photo to each photo category.

For 2025 we are also again running our Raw Reels social media video category.

Winners will be featured in Issue 214 of AMB including an interview with the Shimano AMB Photographer of the Year!

PRESENTED BY SHIMANO

ONEUP COMPONENTS – SEND IT

This category is all about the raw speed, the full-send commitment, and the unbeatable stoke that comes with gravity-fueled riding. Downhill, dual slalom, enduro, freeride, dirt jumping, high-speed trail slashing, and those sketchy push runs – we want to see it all. Show us the grit, the flow, the breathtaking landscapes, and the sheer determination that comes with riding the fall line. Whether it's a banger shot from your local enduro, a World Cup moment, or your buddy absolutely sending it down a gnarly chute, we're looking for high-impact images that capture the essence of gravity riding; framed and composed to perfection.

NVR LOST – BEYOND LIMITS

This category is all about the breathtaking perspective of landscapes – the vastness of the outback, the sinuous trails slicing through the earth, the lone rider dwarfed by mountains, deserts, or endless forests. We want to see creativity and scale, whether it be via traditional photography or drone. Whether it's a top-down view of a winding singletrack, a peloton carving through gravel roads, or a solo adventurer lost in the wild, a winning shot will make us stop, stare, and feel the pull of the ride. As always, composition and framing are key – but most of all, we want images that redefine how we see riding from above and beyond.

PURE SPORTS NUTRITION – FULL GAS

The endurance side of mountain biking has evolved, and the Full Gas category is here to celebrate the heart and soul of it. Whether it's the lung-busting grind of a club cross country race, an all-day epic into the backcountry, a marathon sufferfest, or the relentless push of a stage race – we want to see what XC means to you. Show us the grit, the bar-to-bar battles, the technical features, and the landscapes that make XC riding so raw and real. We're looking for images that tell a story, capture the essence of XC, and bring the race, the effort, and the adventure to life – with flawless composition and framing that make every detail count.

MTB DIRECT RAW REELS

The Raw Reels social media video category is looking for the best video that captures the fun and natural environment of MTB riding. Videos must be raw, under 60 seconds, have no music, and be optimised for social media. They will be judged by the panel and uploaded to AMB's social media accounts. Submit cover and details via Photo Awards site, and send full reel to competitions@ambmag.com.au

VENTURE FURTHER

Far beyond the stacked loops and well-worn trails, adventure is limitless. A bike isn't just a tool – it's a ticket to the wild, a way to chase the horizon and disappear into the unknown. This category is all about the places your bike can take you, whether it be an epic bikepack or day exploring lesser-known gravel roads. Show us the vast nothingness of the outback, the razor-thin ridgelines that stretch forever, the remote, untamed landscapes where the only sound is your tires crunching over dirt. A winning shot will pull us into the moment, making us feel the scale, the solitude, and the sheer commitment it takes to be out there. Composition and framing matter, but above all, we want to be inspired.

YOUNG PHOTOGRAPHER OF THE YEAR

In this category, our judges select a short list from all the images submitted by photographers under 20. So the entries can come from any of the four photography categories. We'll be looking for proficient composition and editing, capturing the moment and really nailing the category. There will also be an interview in Issue #214 of AMB.

Prize: A Shimano Deore Upgrade Kit valued at $1,000

PHOTOGRAPHER OF THE YEAR

To win the overall title you need to enter a photo in each of the photography categories. You need to blow our judges away; the level to win the overall title has been set really high. Study the categories and shoot to suit.

Prize: $2000 plus a Shimano XT groupset valued at $3,000 and a full feature in Issue #214 of AMB (priceless!).

Head to **photoawards.ambmag.com.au** to enter.

Full terms and conditions along with all category details are online.

FLASHPACKING: EXTENDING YOUR RANGE

BEYOND THE BIKE PARK SERIES WITH BOSCH

WORDS ANNA BECK | PHOTOS GERARD LAGANA, RAIL TRAIL REFUGE

At AMB we are no strangers to bikes. We ride trail, bike park, sketchy jank, and flow. We race cross country, enduro, gravel and downhill. Suffice to say – we enjoy all things bike. For many rusted-on cyclists, bikepacking is a new and novel way to spend a solid amount of time exploring 'behind bars', but for many people the idea of carrying kilograms of tents, sleeping bags and cooking equipment is undesirable to say the least.

A better and more enjoyable way to get started on multi-day bike adventures is to ditch the gear and flashpack: travelling with minimal clothing and equipment and staying in hotels, pubs or Airbnb's in remote and scenic locations. Some of my greatest experiences riding bikes have been on multi-day flashpacks that feature a big mix of gravel, road, singletrack, mountains, fireroads, bunyips, yowies, native flora and fauna, and – at the end of every day – a severely shattered body filled with awesome experiences and memories from a big day out.

Flashpacking really allows you to travel much further and explore beyond your backyard, or bike park, and with the new generation of Bosch Performance Line CX and SX drive units and increased battery capacities, getting started flashpacking has never been so accessible.

PLAN YOUR ROUTE

Route planning is the key to a successful flashpack. Sometimes, though, even the most careful of plans can come unstuck with overgrown trails or closed bridge crossings. Luckily, the Bosch Flow app features route planning guidance that can definitely get you out of a pickle if you're unsure the best way to proceed mid journey. Feeling a bit more tired than expected? Select the Daily route option that gets you to your destination in the quickest time. Looking for quieter trails and a flatter route with a bike path? The Leisure option may be the best choice. Fuelled up on a packet of corn chips, a few handfuls of gummi bears and a can of Coke? Head for the hills and a more adventurous eMTB route.

For those who thrive on the excitement of planning a flashpack adventure, you can spend some time planning your route using mapping software Komoot, and sync that route to the Flow app to navigate your voyage. If you choose to use your phone as a display, you can also use the app to navigate on the fly. Need to share your adventures with the world? Upload your ride to Strava directly from the Flow app.

FOCUS ON MODES

Usually when I'm reviewing eBikes, I find myself riding in eMTB mode most of the time. This is the perfect setting for trail riding that reliably reflects your input and delivers some punchy power when it's needed most. The setting I probably use least on the trails is Bosch's Tour+ mode, but flashpacking where the Tour+ really shines. Tour+ delivers 'stepless' assistance with up to 340% support by adapting support between Eco and Turbo outputs.

Tour+ offers more range on flashpack adventures by dialling the output down when terrain is mellower, while supporting your efforts with ample power delivery if things get a bit too spicy on the climbs. This isn't to say that you can't flashpack in the more sporty eMTB mode, and I would wholly recommend this for any sections of your flashpack where you're adding in trails on the way, but Tour+ is a great option to use on those gravelly fireroads, horse trails and stock routes that get you out of the city and into more remote areas to explore.

RANGE ROVING

With the launch of the new generation of Bosch Performance Line CX, we saw the concurrent release of the Bosch PowerTube

800: an 800Wh battery that can be paired with the 250Wh PowerMore range extender for a huge 1050Wh setup. When I first hopped on the Trek Rail+ with the 800Wh battery I was amazed at just how far I could ride, on trails, with significant elevation, in eMTB and Turbo mode; nearly 70km. This was without a PowerMore range extender.

Because everyone is unique (rider size and riding style will impact battery use), the Flow app uses AI technology to build a profile of your ride style and history and is able to estimate your range alongside your selected route. With larger capacity batteries than ever, and a range of energy-saving modes, you can now explore and adventure further with Bosch, even a 100km flashpack day isn't out of reach.

With the System Controller located in the top tube of most Performance Line-equipped mountain bikes, there is a constant visual cue to ensure enough juice is left in the tank to get to your overnight destination. If you're really unsure, you can get a more precise percentage of battery left while accessing the Flow app's navigation, Range Control, which uses all of the input rider data and destination as well as desired battery level at destination: perfect for shorter flashpacking adventures where you don't want to take a charger.

THE DESTINATION

Mountain bike tourism is increasing in regional areas of Australia, and a parallel increase in bike-friendly accommodation has emerged in key riding areas, especially in key tourist areas such as trail networks like Blue Derby and the long spanning gravel adventure of Queensland's Brisbane Valley Rail Trail. Accommodation such as the 'Rail Trail Refuge' in Linville, QLD, is purpose built for cyclists and eBikers to relax and recharge both body and bike, meaning you can drain that 800Wh battery, 250Wh PowerMore and do it all again the next day. Plus, many accommodation options catering for cyclists have washing facilities meaning you can set off in some fresh pants on day two.

But you don't need cycling-specific accommodation (though it is nice). Staying in a pub usually means you have dinner on site. Make sure you book before you head out on your adventure, and check if there is a spot to charge your bike (there always is, but it's good to ask).

So if you haven't considered bikepacking and you're an eBike rider, now is the time. With the Flow app, energy conserving rider modes and increased battery capacities on bikes, there is no better time to dip your toes into a big overnight adventure.

FLASHPACKING HOT TIPS WITH BOSCH

- Plan your route using cycling heatmaps and talk to people about good route ideas

- Get a gauge of what the distance and profile of the ride is like using an app like Komoot that can directly sync to the Flow app

- Preparation is important: do enough rides with the Flow app that it has a good guide of what your rider characteristics are like so it can more accurately determine range on a flashpack

- Likewise, time how long it takes for your main battery and range extender to charge so you're not caught short on your flashpack: ideally get your bike straight on charge when you arrive at your accommodation.

- It's nice to do an overnight flashpack without much gear, but with an e-bike you have a bit of a buffer, especially when it comes to riding up steep climbs or adding trails into the mix. Carrying a change of clothes and bike and phone charger is much less of an issue on an eBike, and slows you down far less.

- If travelling solo always let someone know of your ride plans and destination

- It's always wise to pack a small first aid kit, but more important when doing more remote adventures

- Take far too many snacks. It won't be too many four hours in!

2025 AUSCYCLING NATIONAL CHAMPIONSHIPS

WORDS AND PHOTOS **MATT ROUSU**

CROSS COUNTRY SHORT TRACK (XCC)

LUNG-BUSTING EFFORT AT ALTITUDE

We headed to Mount Buller in the Victorian High Country for the key events at the 2025 Australian Mountain Bike Championships. Friday was the first big day of racing, with the cross-country short track (XCC, in bikespeak) taking centre stage. It was a dusty, warm day up here in the mountains.

The XCC course was a two-minute, flat out loop with a couple of punchy climbs and one little descent, meaning it was full gas the whole time. The course featured stunning views as riders raced through the alpine village.

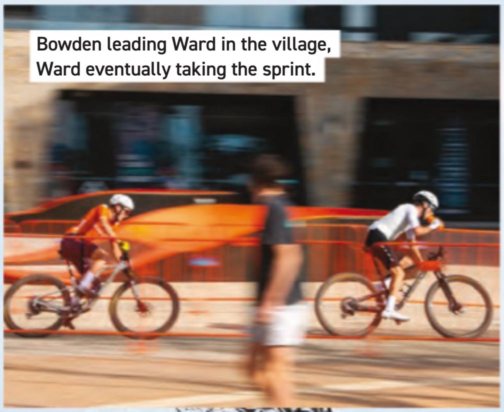
Every category was stacked with riders, with athletes ranging from 12 to over 70 years of age!

In the elite women's category, we saw Rebecca Henderson battle it out with Isabella Flint and Zoe Cuthbert for the first half of the race. Henderson put the watts down on her new Factory Orbea Oiz and rode away to a solo victory. Flint claimed her first-ever elite medal with a silver, and Cuthbert took the bronze. Behind them was a great battle between Kathryn McInerney and Katrina Dower, who exchanged places multiple times. McInerney took 4th and Dower 5th in the end. Ella Menigoz took the U23 Women's title by 14 seconds over Ruby Dobson.

The elite men's race was tighter, with a big group settling in at a fast and lung-busting pace. Riders were constantly jostling for position, and an unlucky touch of bars saw Queenslander Brent Rees fly into the barriers with Sam Fox during one of the final laps. Fox was able to remount quickly and claw his way back onto the podium with a 5th place. Toby Stewart and Tasman Nankervis sprinted to the line for the bronze medal, Nankervis incredibly taking it with a dead-flat rear tyre.

That left Jack Ward and Scott Bowden to sprint for the win. Bowden made a crucial error on the final corner, giving Ward a comfortable sprint finish and his first elite title. Harry Doye rode with the lead pack of elites to take the U23 XCC crown.

U23 Ella Menigoz dominated the XCC and XCO


Bowden leading Ward in the village, Ward eventually taking the sprint.

Batemans Bay, 2 hours from Canberra, easy access from Sydney and Melbourne

BATEMANS BAY NSW OCT 2025

SEA OTTER™ AUSTRALIA

SEA OTTER AUSTRALIA: THE NEW MEGA BIKE FESTIVAL ON MOGO TRAILS!

Not just racing but the ultimate MTB Festival!

Imagine 8 official events, from hardcore Gravity Enduro and Fox Superflow® to an epic Thule Marathon, junior champs on the new Mogo Trails! Plus, a Gravel Gran Fondo and E-bike Four Cross, Cyclo-Cross beach battles, and a judged Freestyle Comp at the Event Hub! Sign up for races now at seaotter.au and secure your spot!

Gear Up at the Sea Otter Australia Event Expo!

Your MTB paradise awaits! Check out 150+ brands with the latest gear, demo rides, exclusive deals, and chances to meet your cycling heroes. Race and ride, then roll back into the hub to swap stories, chase the groms in the Kids Zone, grab a cold one, and soak up the festival vibes.

Don't miss it – plan your visit now!

Stay in the Official Sea Otter Australia Festival Village!

Imagine being just a 10 minute walk from the Festival Expo and Race hub! Check out our NSW South Coast Info Portal. Race, ride, demo and meet EVERYONE at Sea Otter Australia!

This is where you NEED to be this October!

MOGO TRAILS & BATEMANS BAY
NSW SOUTH COAST | 22-26 OCTOBER 2025

For more event info visit seaotter.au

ROCKY TRAIL ENTERTAINMENT THULE SMITH BOSCH Forestry Corporation MOGO TRAILS

AUSSIE DOWNHILL KING AND QUEEN CROWNED

FAST, LOOSE AND FEARLESS

Saturday was all about the downhill. After three days of practice and a seeding run on Friday, most riders were feeling fatigued. The course was blown out: very fine dust, huge loose rocks, corners that had moved a foot further back into the mountain, and holes that could swallow half a wheel littered the track.

The track itself had three main sections:

- The upper woods, with tight corners, small gaps, and two road gaps (although the second road gap was probably a fraction slower for the most skilled riders).
- The second wood section, a little straighter and faster, was arguably more technical, with some awkward sections that were time sucks for the unprepared.
- The bottom of the track was flat-out, with long straights, wide-open corners with multiple lines, followed by the fast motorway.

All up, it's 3+ minutes (2:58.981 was today's fastest time) of rough, loose, and flat-out alpine track—a great place to decide our National Champions!

Notable Achievements:

- 11-year-old Benson Archer winning the U13 men's title with a 3:35
- 74-year-old Michael Benson winning masters 9 men
- U15 women's rider Madeline Lloyd clocking a time of 3:40.863, the 6th fastest women's time of the day
- David Tarling returning from a shattered femur 18 months ago to win masters 5 men
- U17 rider Tilly Boadle with a 3:29, and U19 rider Elleni Turkovic with a 3:27 – Elite medalist times

There are stories of glory and stories of pain at every National Championships, but the happiest athletes today were our Elite Champions: Sian A'hern and Luke Meier Smith, both a little worse for wear after a big week. They were all smiles on the podium – Sian claiming her 4th elite title and Luke his 3rd in a row.

Luke Meier-Smith on his way to the win

GIANT
ORG.AU
MAXXIS
FOX

Sacha Mills battled forthe title, ultimately taking second

Elite women's podium

GWM MOUNTAIN BIKE NATIONAL CHAMPIONSHIPS
National Championships
1
2
3
GWM

Elite men's podium

GWM MOUNTAIN BIKE NATIONAL CHAMPIONSHIPS
National Championships
1
2
3
GWM

Elite Women Podium

1. Sian A'hern
2. Sacha Mills
3. Zali Miklas
4. Ashleigh Weinert
5. Bella Schofield

Elite Men Podium

1. Luke Meier Smith
2. Troy Brosnan
3. Kye A'hern
4. Jackson Connelly
5. Ryan Gilchrist

U19 Women

1. Elleni Turkovic
2. Sami Rothwell
3. Amelia Freeman

U19 Men

1. Oliver Colthup
2. Zac Bradley
3. Lachy Roberts

CROSS COUNTRY OLYMPIC (XCO)

A BATTLE AGAINST THE ELEMENTS

Over the years, the Cross Country Olympic discipline has evolved from a multi-hour event (perhaps one of the first in Aus was raced at Buller in the '90s) into a red-lining, 90-minute smash fest.

The course set out for this year's Nationals was a relentless climbing course with little time for rest. However, the Bureau of Meteorology had other ideas. A severe storm warning came through Saturday night, leaving organisers in a spot of bother. The predicted high winds posed a risk of treefall (indeed, I myself saw a huge tree fall during Saturday's downhill race).

Racing was postponed, and the course was shortened to about half its original length. There was only a short section of singletrack, a nice off-camber grass descent, and a long, steep fire road climb. The alterations made it feel more like a 7-minute XCC course. AusCycling endeavoured to deliver the postponed event by combining all of the masters men's and U17 categories.

Early Highlights:

- U17 Women's rider Charli Edwick storming away from the field to win by over 3 minutes
- The Masters Women's race
- Myles Higgins in Masters 10 – the oldest competitor of the week, racing alongside kids 60 years younger

The closest racing of the week came between Rebecca Henderson and Isabella Flint. Henderson won in dramatic style with a sprint finish against Flint after nine laps of racing. Henderson crashed on the opening lap, injuring her shoulder and thumb. This allowed Cuthbert and Flint to gain a lead. Henderson bridged the gap and settled in with them.

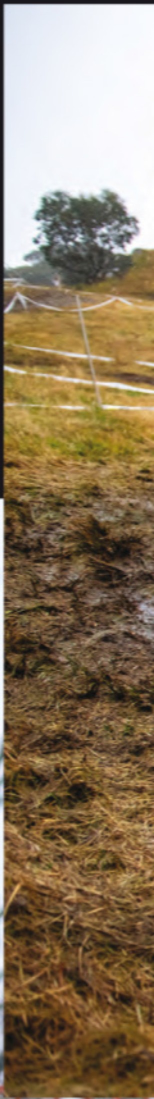
Behind the lead trio, Kathryn McInerney, Katrina Dower, and Sarah Tucknott battled for the remaining podium spots. Ella Menigoz flew to the U23 victory, surviving an early challenge from Ruby Dobson, while Amelie Burrel rode strong to win the U19 category.

Flint and Henderson dropped Cuthbert in the final laps as wind and rain intensified. It was Henderson's 21st national title, and likely the toughest win of her career.

The men's race saw the worst of the weather. Defending champ Cam Ivory pushed the pace early, with only Sam Fox able to hold on. Ivory faded, and Fox surged solo. Behind, Jack Ward, Reece Tucknott, Toby Stewart, Tasman Nankervis and Scott Bowden traded places.

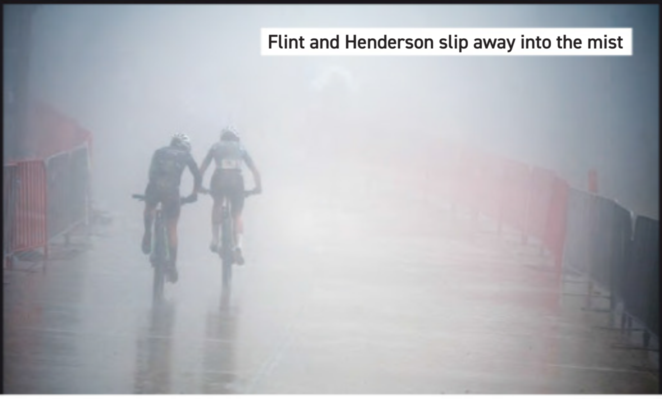
Harry Doye backed up his XCC title with a U23 XCO win, while Connor Wright claimed a commanding victory in U19.

Fox kept the pressure on, riding 10 seconds faster per lap than his rivals, securing his second elite national title. Ward, Tucknott, Stewart, and Nankervis rounded out the podium.



Sam Fox was the best on the day

Isabella Flint and Zoe Cuthbert work together at the start of the women's race



Flint and Henderson slip away into the mist

Veteran Australian cross country star DanMcConnell hung his SPD shoes for the last time up after the 2025 National Championships race

Henderson finished, broken, cinching the win despite suffering a crash that subsequently took her out of the first two rounds of the World Cup

Elite men's XCO podium

MOGO'S NEW JEWEL

THE BURNAAGA-GOANNA ADVENTURE TRAIL AND BEYOND

WORDS OLIVE TUTT | PHOTOS JORDAN RIDDLE

The South Coast of New South Wales is rapidly becoming one of Australia's premier mountain biking holiday destinations. Nestled in the lush, forested expanse of the Eurobodalla region, Mogo is a shining example of why. With over 70km of completed trails and more in the works to take the network up to 125km, there's truly something for everyone – from beginners seeking scenic loops to advanced riders chasing adrenaline.

We travelled down from Canberra to check out the new developments to the Mogo network and ride the brand new 28km Burnaaga-Goanna mountain adventure trail. This trail is a backcountry-style descent starting from the peak of Wandera Mountain and descending all the way into the Mogo township. After heading out on our bikes to check it out, we can honestly say the Burnaaga-Goanna trail really makes Mogo stand out.

MOGO
WELCOME TO THE MOGO TRAILS
MOGO

OUT OF THE ASHES AND ONTO THE TRAIL

Only a few years ago, much of the South Coast was scorched in the Black Summer bushfires. Mogo was devastated by the fires and was hit hard again by the COVID-19 lockdowns and two major floods before having a chance to rebuild. The renewed sense of purpose and community is clear, though, and the whole community has come together to build this remarkable trail network that will help transform Mogo into an international travel destination. In fact, Mogo is set to host the inaugural 2025 Australian Sea Otter Classic later this year.

With the recent ten-year anniversary of the iconic trails that put mountain biking tourism on the map – Blue Derby – we could foresee a similar trajectory for Mogo. The scope, variety, and quality of Mogo's trails are certainly on par with Derby, Tasmania, and the new Burnaaga-Goanna trail provides a similar adventure experience to the Apple Isle's Atlas and Blue Tier, with the added perk of accessibility from being on the mainland in New South Wales.

ANYTIME.
ANYWHERE.

XRS™ CONNECT
SMART/ADAPTABLE/RUGGED

Introducing the next generation in UHF CB Radios, the **XRS-660.**

Built with a suite of new features including a Colour TFT LCD screen, Bluetooth® audio connectivity and built-in GPS functionality inside a rugged chassis featuring IP67 Ingress Protection and a MIL-STD810G rating, the XRS-660 is our toughest and most advanced Handheld UHF CB Radio yet.

GME

gme.net.au/getxrs

AUSTRALIAN MADE

THE JEWEL IN THE CROWN

Jordan and I headed down from Canberra early Saturday morning and met up with Shane Spicer, the Mogo Trails Manager from Eurobodalla council, and Ruben White from trail build crew Next Level MTB. Talking with them it's clear that everyone involved has put a lot of heart into the Mogo trails and there has been a major focus on accessibility and sustainability. Shane shuttled Jordan, Ruben and I to the peak of Wandera Mountain in the morning to the centrepiece of Mogo's emerging mountain bike paradise: the brand new 28km Burnaaga-Goanna mountain adventure trail.

This backcountry-style descent starts at the peak of Wandera Mountain and descends all the way into the Mogo township. After heading out on our bikes to check it out, we can honestly say the Burnaaga-Goanna trail makes Mogo stand out.

The Burnaaga-Goanna trail is pure, unadulterated mountain biking fun the whole way down. The 28km route is a masterclass in trail design, artfully integrating the natural landscape into a fast, flowy descent that offers both accessibility and excitement. With a few cruisy climbs and scenic traverses interspersed throughout to ensure you see the whole landscape around, Burnaaga-Goanna's not just any old adventure trail – it's an immersive experience in the region's terrain, ecology and beauty.

From the summit, you're welcomed with a stunning 270-degree view of the surrounding valleys and coastline. It's the view you'd drive up to look at, but unlike a roadside viewpoint, on the Burnaaga-Goanna trail, you get to ride world-class trails on the way down! And the vistas and scenes as you continue to snake your way down the mountain don't disappoint either.

Rated blue for its overall difficulty, the Burnaaga-Goanna trail is more than achievable for ambitious beginners to make it down while enjoying the ride and taking in all the scenery. Optional A-lines set off to the side of the main lines take full advantage of the natural features, allowing experienced riders to have a bit of extra thrill and show off some style. You can pick up some significant trail speed the whole way down, and there is the opportunity for riders to push their limits and hit some serious pace, if that's your jam.

The first sector descending from the peak of Wandera is the steepest part, with many fast, tight switchbacks winding rapidly through the forest and glimpses of the vistas beyond as you descend the hill. It then transitions into rainforest-like terrain for a few kilometres, threading through corridors of trees, picturesque river crossings and lots of that pinned trail speed I mentioned before.

Of course, with such picturesque landscapes on offer, there's no

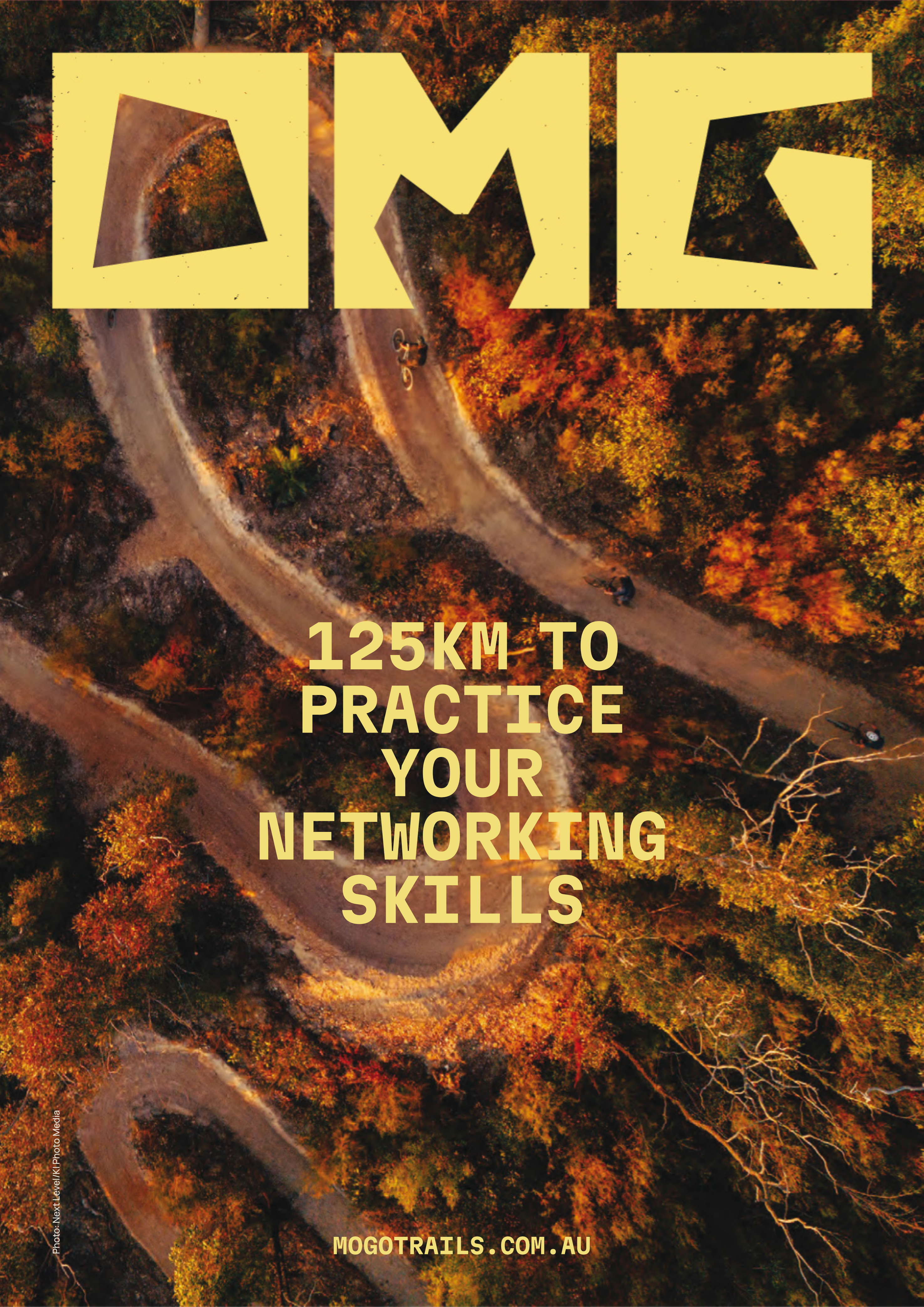

OMG
125KM TO PRACTICE YOUR NETWORKING SKILLS
MOGOTRAILS.COM.AU

Photo: Next Level/KI Photo Media

need to rush on a trail like this. If you relax a little bit and flow through the descent and traverses of the rainforest, the dappled light through the trees allows you to connect with the nature around you, although you might want to watch out for leeches; they do tend to ruin the serenity.

The jewel in the crown of the Burnaaga-Goanna trail would have to be the section where you enter the granite country, where wide-open rock slabs and boulder gardens demand skill, nerve, and the occasional choice of line. Here, the terrain opens up dramatically, giving you the sensation of flying across the landscape rather than simply riding through it. The new trail finishes up coming into Mogo after 28 gorgeous kilometres. Still, if you're up for a huge day, you can follow the existing network into Batehaven, making for around 70km of singletrack in one ride.

Ruben was the ultimate tour guide down the Burnaaga-Goanna trail, having overseen the whole project. He pointed out to us all of the rock armouring and drainage work the trail builders have done to make sure the trail is sustainable and long-lasting.

Although the trail conveniently ends in the Mogo township, getting to the peak of Wandera Mountain does require a bit of a trek. A shuttle service will be available (approximately a 40-minute trip from town to summit) from the Mogo township. If you're really keen, you could get in two laps daily, but we recommend starting with one.

Head up in the morning and take your time to experience the trail, soak in the landscape and spirit of the ride before finishing up in Mogo for lunch. It's definitely not a one-and-done ride, however, and if you're itching to do it again, you can always shuttle up again the next day. We're sure it will be just as magical the second (or third) time around!

The Burnaaga-Goanna trail is a truly unique backcountry-style descent with exciting natural features woven through the raw terrain, providing an exhilarating mountain biking experience.

If you only have a day in Mogo, we highly recommend taking a shuttle up to Wandera in the morning and taking a break for lunch in the township.

We checked out the Mossy on Gardens café in the Eurobodalla Regional Botanic Garden for a well-earned mid-ride feed. The food is delicious, and the surrounding gardens are a stunning and tranquil spot to pause. It's a great spot to stop with your family and is just across the road from the Botanic Garden Trailhead, where you can spend the afternoon exploring some of the other trails in the network. You can also follow the trails through to the Foxdog Distillery for some lunch and a cheeky gin before heading back out for some extra laps.

Over lunch, Shane told us all about the planning of the network and how one of the major sticking points of Mogo over a lot of other

OLIVE AND JORDAN'S TOP 5 MOGO MO MO'S

A few gems from our ride that might not make the promo reel, but definitely made the trip:

1. **Jordan's hat, gone too soon.** RIP to his brand-new cap, lost to the wind at 6:30 am when he stuck his head out of the car when the windscreen fogged up.
2. **Olive vs. the tiger leech.** Screaming, crying, and yelling "Get it off! I can feel it's on me!" while hopping around the forest. Dramatic. Iconic. It was just on her shoe.
3. **Granite slab drama.** Olive slid sideways down a huge granite slab… and somehow saved it. Honestly, it looked sick.
4. **E-bike mayhem.** Olive full-sends over the bars in the Botanic Gardens carpark by accidentally pedalling in turbo while pulling the brake all the way in. Mavens definitely work!
5. **Where's Jordan?** Lost in the gardens while taking photos. Turns out he was blending in with kangaroo statues. Completely invisible.

For more info on the trails, and a network map, head to **mogotrails.com.au/the-trails**

networks is how accessible it is for all levels of riders. The different trailheads and traversing trails have been designed so they are easy to navigate and you never have to ride a level of trail you're not comfortable with in order to get back home.

This will make Mogo a far better experience for beginners and families who don't want to accidentally get stuck on a double black trail! The team are particularly proud of the Skyrabbit Jumpline trail, which is set to have some of the best drainage of any trail in the world, making it suitable for all conditions.

THE PERFECT DESTINATION FOR A RIDING WEEKEND

Mogo Trails have a lot more to give than the iconic Burnaaga-Goanna trail, making it a perfect destination for a multi-day mountain biking holiday. One of the things that sets Mogo apart is its accessibility; only a 2-hour drive from Canberra and 3.5 hours from Sydney, it's far more accessible than other premier destinations in the country and easy to take a weekend to head out on a whim.

Dedicate a day to the Burnaaga-Goanna trail, check out one of the culinary delights the area has to offer, and then head to one of the many beautiful beaches nearby for the afternoon. There's an extra two days to spend in the core network – with three different trailheads and 90km of singletrack on offer, you could pretty easily spend an entire week there if you so please. The amount of accommodation on offer for every budget is almost overwhelming: take your family or get a group together for a countryside or coastal Airbnb or holiday park. Or, if you like to live on the wild side, check out the NSW State Forest website for some old-school camping options.

The sheer variety of trails that Mogo offers is truly impressive. There's something for everyone to enjoy – from beginners to jump track obsessives and tech fanatics. You can see that a massive amount of thought and planning has gone into making all the different levels of trails easy to access and navigate.

For a family cruise or longer loops, park in Mogo behind the shops, and it's a short ride to the Mogo trailhead. The trail starts with an impressive feat of trail building: the Mogo switchbacks. If you're staying in Batehaven, there's a trailhead there as well that traverses into the network for a full day of riding. Stop for a lunch break in Mogo, check out the Botanic Garden to relax, and return to the trails.

If you're looking for shorter, 'sessionable' loops, a whole bunch of trails branch off from the Trig Point – a short drive or climb up the fire trail out of Mogo. These trails are ideal for an extra thrill after descending Burnaaga-Goanna, with a mix of blue flow, black diamond, and double black diamond tech, and multiple jump lines.

I got to have a little peek at some of the new jump trails and tech lines in the works – holy moly, they're exciting. There are some very cool features you'll definitely want to check out. You could easily spend the whole day there as well, and they'll keep the gravity fans coming back for more, day after day.

A big draw point of the Mogo network is that you can really mix it up; you don't have to ride from dawn to dusk every day (unless that's what you live for). Mogo's beauty lies in the balance. You can easily spend three to four days and do a different style of ride every day, with plenty of options to chill out afterwards in a stunning area. Ride hard, rest well, and take your time exploring everything this lush corner of the world has to offer.

Go for a surf at Broulee and take a sneaky beverage with your mates at the Broulee Brewhouse. Take your kids for an afternoon at the wildlife park. Check out all of the artisan shops that Mogo has to offer. Take a day for a bushwalk in Murramarang National Park. Paddle in the Clyde River. Grab a coffee at every café or van you pass. There's so much to ride and to experience in the area, you'll never want to leave – and you'll keep coming back.

What truly makes mountain biking and trail destinations special is the community spirit, and Mogo has it in abundance. From local riders and trail builders to business owners and staff, there's a shared pride in what's been built there, and it clearly shows.

Whether you're chasing an epic adventure trail, the thrill of gravity trails expertly designed by some of the greatest trail builders around, building up your skills, or looking to explore with your friends and family, the Mogo trails are for you.

OMG
GRINS FROM GEAR TO GEAR
MOGOTRAILS.COM.AU

Photo: Rocky Trail/Nick Waygood

NEXT GEN

FOUR YEARS ON AND KIDS ARE STILL PLAYING IN THE DIRT

WORDS **ANNIE ARNOTT** | PHOTOS **SUPPLIED**

In November 2021, AMB investigated the rise of mountain biking school programs for kids in Australia. In the few short years since then, it feels like mountain biking has really become a part of the mainstream sporting fabric within Australia. With more kids hitting trails on bikes than ever before, we wondered how mountain biking at school has changed in that time.

What we found is a new standard of school sport.

While donning their school sports uniforms, kids across Australia are getting out on the trails to hone their technique, build fitness and develop life skills. In Brisbane, Queensland, multiple schools offer mountain biking as a school sport thanks to the coaching outfit Flow Mountain Bike Coaching. In Coffs Harbour, NSW, a group of enthusiastic teachers have got mountain biking onto the timetable at one school. At Snowy Mountains Grammar School, in Jindabyne, NSW, mountain biking is offered to students in three out of four terms.

We spoke to the people involved to gauge the progress of mountain biking as a school sport, why they believe it's so popular, and some of the limitations and difficulties they needed to overcome as mountain biking continues to explode in popularity nationwide.

LIGHTWEIGHT BIKEPACKING TENT.

MADE FOR THE RIDE.

© Scott Rinckenberger

MSR®

HUBBA HUBBA™ BIKEPACK

Designed for life on two wheels. The comfortable, lightweight tent packs into a small but stable waterproof handlebar bag for the ultimate on-and-off bike performance.

- 30cm DAC Poles
- 0.9kg Minimum weight
- Handlebar spacers free up space for hands

Spelean spelean.com.au 02 9966 9800

SOUTH EAST QUEENSLAND: ON-SITE TRAILS AND EXTRACURRICULAR OPTIONS

In South East Queensland's leafy eastern suburbs, students across eight schools are mountain biking as a school sport thanks to Flow MTB Coaching (FMTBC). Founder and owner Mark Watts and his team of five coaches coach up to 100 hours per week on the trails, for students ranging from grade one to year 12.

At Moreton Bay College, FMTBC facilitates mountain biking coaching five days a week as an after-school sport. The school is lucky enough to have the land and funds to build its trails on campus, so students can get changed, jump on their bikes, and be at the 1.5km trail within moments of the afternoon bell ringing. While the trail is maintained professionally, FMTBC teaches trail care, standard skill development, and fitness.

Redlands College offers mountain biking as an afternoon sport to students in Years 7 to 12. Proximity to the dirt means that FMTBC can ride with students from school to the nearby local trail network where they work on skills, fitness and competitive skills. Gumdale State School offers mountain biking as an elective for students in Years 4 to 6. Those students leverage Moreton Bay College's campus, where they learn and develop basic bike skills and, hopefully, develop a lifelong appreciation for riding.

The other schools (Ambrose Treacy, Iona College, Padua, Hillcrest Christian College and Clayfield College) offer mountain biking as an extracurricular sport on weekends, with students riding a variety of trail networks from Mount Cotton and Nerang to the Sunshine Coast and Toowoomba. Though the kids rely on their parents to get them to the trails, Mark says students and their folks are keen to get out on bikes, so school sports on a weekend are not a deterrent.

Distributed by Pedal Group Pty Ltd

CUBE
READY FOR
100 Nm
UPGRADE
BOSCH
ePowered
BIG ON TRAVEL.
BIG ON PERFORMANCE.
BIG ON VALUE.

STEREO HYBRID ONE77 SERIES

Featuring a High Performance Carbon frame with adjustable geometry, 170mm front/rear suspension, powerful 4-piston brakes, 12-speed drivetrain, mullet setup and powerful Bosch CX system, the CUBE **Stereo Hybrid ONE77** is built for rowdy trails and big lines and ready to power back uphill to hit it all again - without weighing you down.

LEARN MORE

CUBE

cubebikes_au

"These programs happen on Sundays, so they don't clash with Saturday school sports and parents have to get students to the trails," Mark says, "they're all very engaged and very keen."

In his eight or so years of operating, Mark has gone from coaching at a single school to eight schools. Part of that growth is the culture associated with mountain biking and FMTBC.

"Parents are keen on the culture we put across," Mark expands, "It's allowing kids to take risks within a safe environment, acknowledging that other people may do things better than you, that you're working on your skills, but that you're supporting each other."

"Ultimately, everyone feels like they have a space; they belong, and there's an opportunity to progress."

That progression is on display when competing at Rocky Trail Entertainment Academy events, where students can race on different styles of trail and see how they stack up against their peers.

"Up to forty schools – hundreds of students – turn up to the Rocky Trail Academy events," Mark says. "It's where they get their opportunity to compete, and they can do each stage up to five times so there isn't the pressure of only getting one perfect race run."

To Mark, mountain biking in schools is also about teaching kids important personal skills like responsibility, in addition to race skills like competition and peer support.

"We tell kids 'you're responsible for bringing your water and ensuring you have spares and food. You can ask for help, but you must ensure it happens."

Another life skill Mark is keen on imparting is that sport can be more than competition.

"Often, school sport is centred around competition. But [mountain biking] could be something you do for the rest of your life. It's an opportunity to connect with people and the community. If you want to compete hard, you can do that, but if you enjoy doing something social, in natural environments, that's available too."

THE COFFS COAST SOLUTION TO MOUNTAIN BIKING IN SCHOOLS: ENTHUSIASM AND PASSION DRIVING THE PROGRAM

At Bishop Druitt College (BDC) on the Coffs Coast, NSW, what started as a conversation between one teacher and parents about getting students to National Mountain Bike Interschools in Thredbo in 2022 has grown into a program providing foundational and racing skills and development, as well as the opportunity for students to experience and connect with nature.

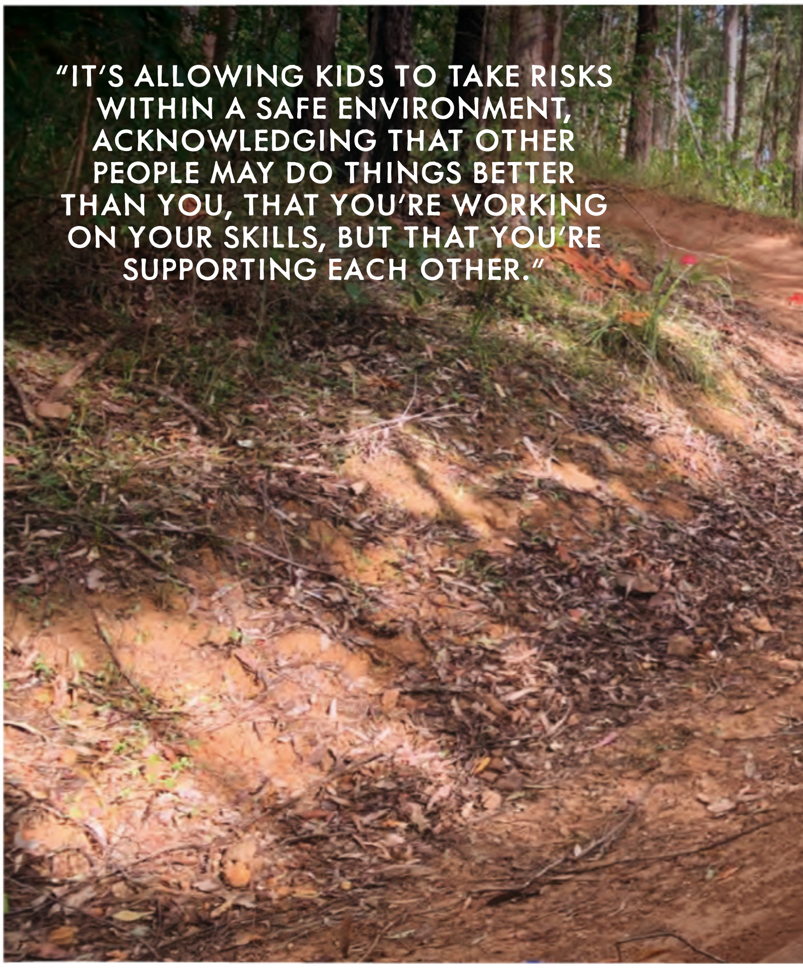
Thanks to the infectious enthusiasm of teachers Joel Davis, Patrick Galvin, Richard Smith, and Angus Harris, the BDC Mountain Biking Program has been building momentum since its inception. Since getting a handful of students to the 2022 Interschools event, BDC now boasts a program that has over one hundred students as alumni. The program has been so successful within the small community that they have a Shingleback trailer to get kids to the trailhead. And, according to Patrick, the program is still growing.

"Last year was massive," he says. "So with the support of the BDC's executive, we could get mountain biking on the timetable."

That timetable sees students in Years 5 to 8 riding off-site at local trails, and this year, an on-site foundation skills program for Years 3/4 has been introduced.

Joel says the program is aimed at skill development and providing mountain biking to all students, as well as racing opportunities for those who want to compete,

BISHOP DRUITT COLLEGE
FAITHFULNESS IN SERVICE
BDC MTB



"IT'S ALLOWING KIDS TO TAKE RISKS WITHIN A SAFE ENVIRONMENT, ACKNOWLEDGING THAT OTHER PEOPLE MAY DO THINGS BETTER THAN YOU, THAT YOU'RE WORKING ON YOUR SKILLS, BUT THAT YOU'RE SUPPORTING EACH OTHER."

DAVIS
COFFS HARBOUR

JACKS RIDGE
BDC MTB

“SOME KIDS CONNECT MORE WITH RIDING, BEING OUTSIDE IN NATURE, THAN WITH COMPETITION, SO IT’S ABOUT AN EXPERIENCE THEY WANT TO CONTINUE FOR THE REST OF THEIR LIVES.”

“that [competitive] avenue is there, but our programs are an open invitation to all students, including those who maybe wouldn’t ordinarily go out mountain biking.”

To that end, the school also hosts girls' experience days, with 18 students, from Years 5 to 9, riding in the last event with teaching staff and local female mentors. While some parents' feedback was that they were glad for the girls to experience something they wouldn’t normally do, Joel and Patrick hope the experience days and BDC’s program will boost girls’ participation in riding.

“In the first foundational program, two out of every 30 students were girls,” Joel explains. “Now it’s five in every 30, more than double.”

Joel and Patrick are clued into statistics showing girls drop out of sports in early adolescence. They hope building foundational skills and making the program visible will encourage girls to stick with the sport.

“Last year, there were two girls in the Year 5/6 group,” Joel clarifies. “This year, we have two women staff members who will hopefully be able to join the girls' ride days and skills sessions.”

More than anything, the guys at BDC hope the program will help students foster a relationship with the natural world and build life skills.

“Some kids connect more with riding, being outside in nature, than with competition,” Patrick said, “so it’s about an experience they want to continue for the rest of their lives.”

While putting together the mountain bike program has been a passion project for Joel and his colleagues, and was well-supported by the school’s principal, it hasn’t come without its challenges. The perceived and absolute risk of mountain biking means they constantly assess safety.

“It’s an ongoing conversation with parents,” Patrick says. “Most understand the inherent risk [of the sport], but we ensure we signal risk very carefully.”

This means a bike check and warm-up before every session, ongoing risk and rider assessment, and conversations between staff about riders.

“We focus on slow and controlled speed skills in all programs,” explains Joel. “[Some] kids are not necessarily ready to start on blue trails, and we want to build confidence and safety.”

That means the staff are also aware of the limits of their certifications.

“There’s a good jump line locally, it’s pretty safe and well-built, but we have to say no to kids riding it because it’s not within our qualifications to take them there.”

The team at BDC have plenty of ideas for growing their program, and Joel flags building a gravity trail on campus in the future, to help students create and develop foundational skills without leaving school grounds. “We are lucky with the size and topography of the campus, and we are hoping that is something we can make happen to make our program even better for our students.”

MOUNTAIN BIKING AS A CURRICULUM AT SNOWY MOUNTAINS GRAMMAR SCHOOL

In Jindabyne, Snowy Mountains Grammar School (SMGS) offers four different mountain bike programs for students in Kindergarten through Year 12. With access to trails locally, including Thredbo MTB, and further afield, including Narooma, Eden, and Tumbarumba, SMGS offers programs across a range of riding disciplines to cater to a variety of riders.

The Junior Riders Club, for students from kindergarten to Year 4, is an after-school program that focuses on bike skills, safety, rider confidence, trail etiquette, and environmental respect. Guided by a mix of school staff and local coaches, about 20 kids a week ride in these sessions, which aim to build fundamental skills in a nurturing environment for them to learn and play. Students doing the Duke of Edinburgh Award can also volunteer to assist with the program, supporting younger riders while developing their leadership skills.

Students from Years 5 to 11 can ride on sports days throughout the year (except Term 3, when the focus is snowsports), either cross country or gravity riding. The cross country program builds endurance and skills, including uphill riding techniques, cornering, and conquering trail features.

"Our cross country program is about more than riding," said SMGS Sports Academies Coordinator Jay Williams. "It's about healthy lifestyle choices, personal fitness and connecting with nature."

The gravity program heads to Thredbo MTB park to gain lift access to trails and build gravity riding skills and endurance.

"The gravity program focuses on downhill, aiming to satisfy students looking to progress their skills without the pressure of competition," Jay said.

The Mountain Bike Academy is the school's 'pinnacle' program; students ride for a full day every week. In Term 1, the Academy focuses on downhill riding and training for Thredbo's Cannonball Festival and Interschools events. In Terms 2 and 4, the program focuses more on enduro riding, with students riding the local trails and travelling to different trail networks.

"The Academy program is designed to help students set up professional pathways into the mountain biking industry," Jay said. "Students have access to technical coaching, competition preparation, the school gym and academic tutoring, giving them the tools for success whether their dreams are in racing, coaching, or somewhere else in the industry."

"Athletes ride for a full day each week with various handpicked coaches, competition support, transport and logistical aid, access to our school gym weights program and tutoring to maintain academic progress."

Though SMGS staff design, manage and oversee the program, the school also draws on professional coaches throughout the region. Coaches are sourced from Jindy Riders, Bike Betty, Sacred Ride and Thredbo, which helps students develop skills and make industry connections.

SMGS has also expanded from two to three bike trailers, boosting its transport capacity to more than 60 students at a time.

The Interschools is a big event on the SMGS school calendar. About 20% of students across the entire student cohort – not just those in the Academy program – compete in it.

"It's incredible to see riders who haven't trained in our programs jump in and race," Jay said, "that's the school spirit we're building."

That spirit is evident in the event's results, with SMGS winning the overall champion shield for the past three consecutive years.

"The students seem hungry to keep [the shield]," Jay said.

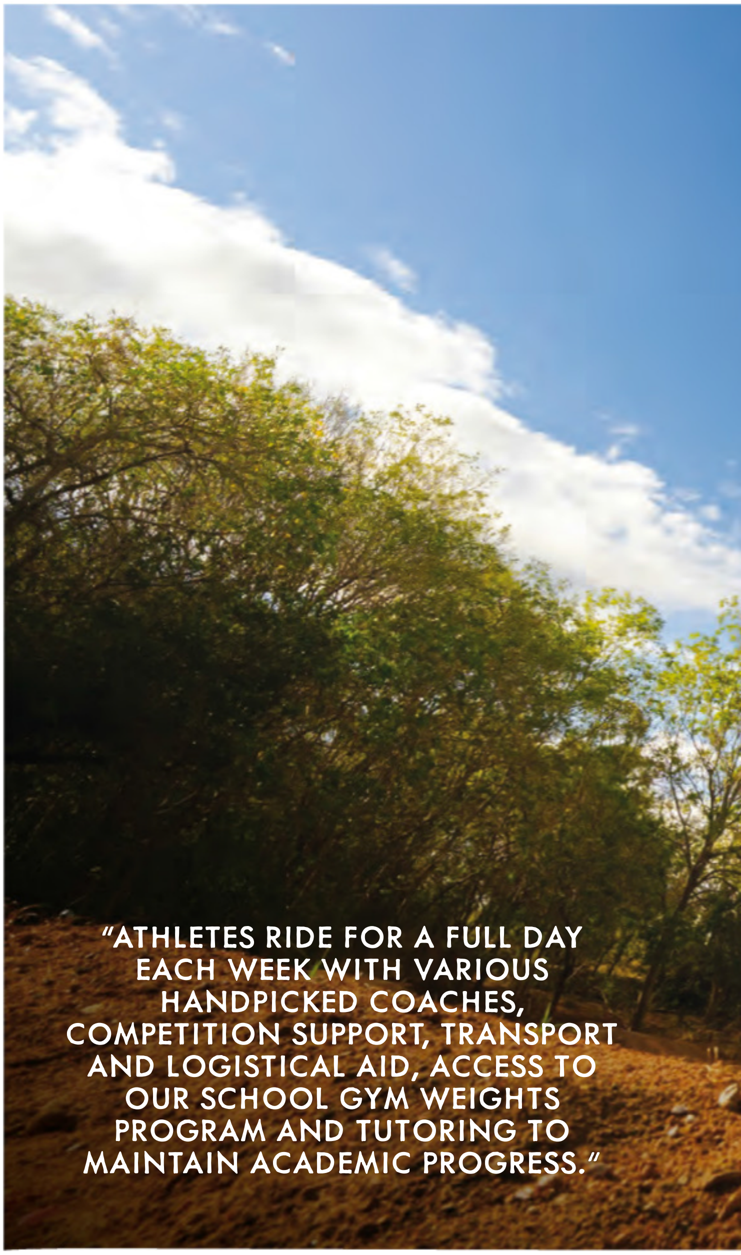
While female riders at SMGS are fewer in number than their male counterparts, they are making their presence known.

"We have a strong community of young female riders who contribute significantly to our overall points tally," Jay said. "Their impact cannot be understated."

Despite the adrenaline and aspirations within the Academy, Jay's favourite program to ride with is the Junior Riders.

"The little tackers are full of energy and a sense of wonder, and our program is all about channeling that. It gets back to the grassroots of why we ride – for fun."

If your memories of school sport are of hot afternoons running around dry ovals, being stuck in goals or the outfield or eye-watering days at the local pool for swimming carnivals, it's hard not to be jealous of kids who get to ride bikes at school. If you're interested in exploring options for mountain biking within your local school community, it all starts with a conversation. The schools involved here have all built their programs from the ground up, creating various models to fit the discrete needs of their schools. It is easy to see that with the rapid rise of mountain biking as a sport within the school environment, the future of mountain biking – at all levels – is looking good.



"ATHLETES RIDE FOR A FULL DAY EACH WEEK WITH VARIOUS HANDPICKED COACHES, COMPETITION SUPPORT, TRANSPORT AND LOGISTICAL AID, ACCESS TO OUR SCHOOL GYM WEIGHTS PROGRAM AND TUTORING TO MAINTAIN ACADEMIC PROGRESS."

Sendy
Sendy

1005

SMGS

FROM OZ TO AOTEAROA

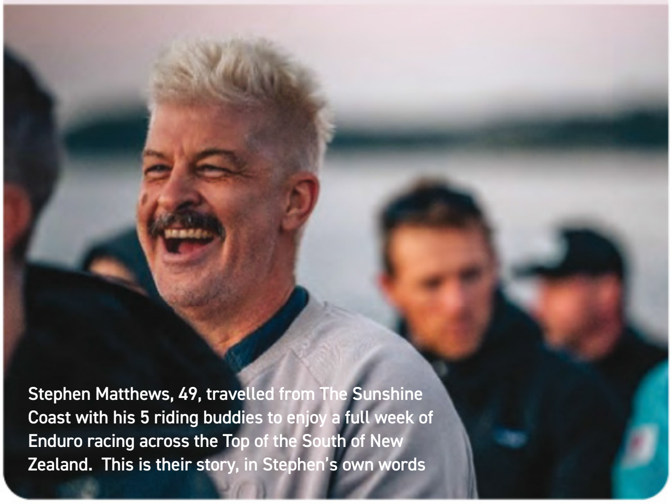
AN AUSSIE CREW'S NZ MTB RALLY ADVENTURE

WORDS STEPHEN MATTHEWS | PHOTOS NZ MTB RALLY

The NZ MTB Rally is a one-of-a-kind, week-long mountain bike adventure that takes you deep into New Zealand's iconic landscapes. But it's neither Queenstown nor Rotorua. Nelson is the new place to be that seriously challenges NZ's established mountain biking destinations.

120 international riders took part in the second edition of the NZ MTB Rally in March 2025 – a 6-day Enduro-format race through some of the best singletrack the top of the South Island has to offer, featuring 4x4 shuttles, a backcountry heli-drop, a scenic boat crossing, top-notch food and accommodation, and unlimited craft beer on ice at the end of each day's racing.

Among them was Stephen Matthews and his crew — six Aussie mates, who were eager to take on this new adventure. This was his Rally experience.



Stephen Matthews, 49, travelled from The Sunshine Coast with his 5 riding buddies to enjoy a full week of Enduro racing across the Top of the South of New Zealand. This is their story, in Stephen's own words

My mates call me Showy, and I first got involved with mountain biking in 2018 when my friends invited me on my first proper ride with them. I soon realised that they would wait for me at the top only so many times (there was a bit of walking involved) and if I didn't improve quickly there'd soon be no more invites for me. Each year we generally do 1–2 boys trips to locations like Maydena, Derby, Thredbo, Narooma and Bright. This year was going to be Queenstown NZ with 16 of us signed up, until a few of us snatched a spot in the NZ MTB Rally. So we ditched the others in Queenstown and chased international glory at the NZ MTB Rally.

OUR CREW

One, two and three of the crew are the Lowe Bro's – Steve, Bob and Dave. Despite their appearances, they are all punching well above their weight on the track and at home. Fourth is 'lay down Sally' (Chris Kelly) he likes to lay down on the trails mid race. Fifth is 'the Hudson hornet' (Ryan Hudson) the quiet achiever and tour mechanic, and last (but not on the track) is Andrew 'Rockstar' Wensing – even God steps aside for him when the cameras start flashing.

DAY ZERO

New connections were already being made even on the shuttle ride to our first camp.

Once off the bus and check-in formalities were efficiently completed, the fun started right away. There was a good chance some of the guys weren't going to see the start of the race with the hijinks and beer-fueled shenanigans on the on-site waterslide. Some played basketball alongside the 'slowest bike race' competition, as others started to put their bikes together. Camp 1 was like every big-kid's dream: water slides, zip lines, a ninja course, 120 top-end enduro rigs and bottomless chilly bins of beer, cider & soft drinks.

Steve, Chris, David, Anddrew and Stephen starting the race week the proper way: making the best of the unlimited drinks from the organisation eskies

To get to the best trails, possible, MTB Rally uses a fleet of 4x4 shuttles

DAY 1 WAIROA GORGE

The shuttle bus trips quickly became a highlight, as this was often our best opportunity to see the mountain we were about to descend. It's hard to match the natural beauty of New Zealand; but it's also hard to admire it as you're racing down an off-cambered, rocky, rooty singletrack.

The first day riding was at Wairoa Gorge, a billionaire's private bike park. Starting the week here was a rude awakening; the tracks quickly escalated in difficulty with a good mix of terrain from technical, flowy, chunky, tight switch-backs, to long and unrelenting runs. Unfortunately the Sunshine Coast's 2-minute Grade 3 trails supplemented with an elliptical bike trainer were apparently not the best preparation for the 15-minute Grade 4 and 5 runs presented to us on Day 1.

Race Director, Ali Jamieson, had warned us that over 80% of injuries in his multi-day events will happen on Day 1 and therefore to ease ourselves in gently.

As expected, Day 1 delivered a whole bunch of carnage. On the first corner of the race, Steve Lowe ate the dirt hard, taking out the title of the fastest ever crash in NZ MTB history! This was followed up by Chris taking an ill-timed laydown in the middle of the track, embarrassingly holding up some pro riders. Then, towards the end of the last stage I myself became one of Ali's statistics, crashing and injuring my rotator cuff.

All this quickly dashed our team's unrealistic hopes of a podium finish as well as my new life as a mountain bike influencer. But we were not the only ones – we did manage to finish in front of last year's race-winner and hero, Matt Fairbrother, who sadly crashed-out of the race on Stage 3 of 33. What a bummer. Heal up soon, Matt!

Wairoa Gorge is a gravity-fed mountain biking paradise, boasting over 70 km of hand-built singletrack through lush native forest

Silvan Forest Mountain Bike Park is a privately owned forest. Matt the landowner a keen mountain biker actually raced the Rally this year – talk about home trails!

DAY 2 SILVAN FOREST

The second day gave us the best of Nelson dirt surfing with powdered switchback on switchback. A common theme has already started to emerge as each subsequent trail was definitely 'the best trail so far'. Yeah, I know that makes no sense. You'll have to take my word for it.

INSURANCE FOR EVERY RIDE
ADVOCACY FOR EVERY RIDER

'When you consider the cost to benefit ratio of the BQ Household membership, it's hard to see a reason why someone in our shoes wouldn't sign up. Between the retail benefits, advocacy and insurance coverage we see fantastic value in being a BQ household.'

Hayden Wright, AMB Tester

BICYCLE QUEENSLAND MEMBERSHIP INCLUDES:

- Comprehensive insurance Australia-wide (accident, public liability, income protection – racing excluded)
- Retail discounts with bike shops & gear brands
- Event discounts at BQ events
- Support advocacy for more mountain bike trails

JOIN

MEMBERSHIP THAT GIVES MORE THAN IT TAKES – FROM $10.49 A MONTH

PH: 3844 1144 | bqinfo@bq.org.au
https://bq.org.au/

BQ
BICYCLE
QUEENSLAND

DAY 3 ABEL TASMAN NATIONAL PARK

It wouldn't be a boys trip if you didn't leave a mate behind. Dave Lowe's battery charger failed overnight, leaving him to spend the morning sorting his issue out and becoming our group's only DNF, while we enjoyed the 'best day' of the trip. (It probably wasn't that really, but that's what we told him!)

It's hard for me to express just how great each day's trails were. The morning transition to Day 3. Stage 2 was worth the journey to NZ on its own. The remainder of the stages gave us nearly everything we could imagine and more, from solid high-power grip to off-cambered powdered pig ruts.

Stages 2 and 3 wind through The Rameka Project, a reforestation and carbon-offset initiative dedicated to restoring NZ's stunning native forests. The NZ MTB Rally is proud to partner with this project, purchasing carbon credits to fully offset the event's carbon emissions.

Stage 5's off-camber beast was the very definition of raw, hand built by the locals whose land we were riding on that were created especially for The Rally. This was probably the most debated trail of the trip. You either loved it or hated it, “Unique. Incredible. Left me wanting to ride more” (to quote Andrew Wensing) is probably the best description of the trail...if you loved it. For the rest of us mere mortals it was pure carnage, certainly separating the talented from the ambitious.

Ferns, roots, black beeches, the Abel Tasman National parks offers natural single-track

DAY 4 BOAT TRIP FROM KAITERITERI INTO CABLE BAY BIKE PARK

Day 4 started off more at our pay-grade, an early start with great coffee and a truly epic sunrise as we loaded onto the boat and headed over to Cable Bay. After an hour on the boat, we picked up our bikes from the beach landing site and rode a 15-minute connection to get to the first shuttles of the day at Cable Bay Adventure Park, situated 30-minutes drive outside of Nelson. Over the past 5 years the entire park has been hand-built by a huge crew of dedicated local volunteers meeting year-round for evening dig sessions often over 30-strong in turnout.

Day 4's trails were more like old school flow trails; some early tight switchbacks to fast rollers and tight flowing sections with some decent drops mixed in too (though wheels-off-the-ground was never mandatory).

What better way to start the day than a breakfast on the roof of a catamaran sun-rise cruise, heading to another amazing day of mountain-biking?

EXTENDED COURSE OR REGULAR COURSE?

By this point, we finally accepted that our egos had until now been writing cheques our bodies couldn't cash – and went for an earlier finish by following the Regular Course option. Given the pros were overheard calling the Extended Course stages 'spicy' I figured the last time I looked down at my pants, I didn't see big enough balls to handle that.

A unique part of The NZ MTB Rally's set-up is each rider's daily choice to tackle the 'Regular Course' or 'Extended Course'. The latter adds an extra 1 or 2 stages each day, typically the most technical trails and/or with longer climbs to access them. There's a separate podium for both courses. Of course, to qualify for the Extended Course Podium at the end of the week, you'll need to complete all 6 Days and 33 big stages. By the end of the week, the results showed that around 50% of the field had gone with the Regular Course. These two course variations allow elite-level pros to compete side-by-side with regular amateur riders, mostly on the same trails, but still offering a good balance of challenge vs fun for everyone without compromising at either end of the field.

DAY 5 WAKAMARINA

FROM HEAVEN TO HELL & BACK

Being introduced to hike-a-bike in the NZ backcountry at the age of 49 was something I'm now glad has been ticked off my bucket list!

Day 5 was one of those days that will be talked about for many years to come. It started with a chopper lift deep into NZ backcountry with only one way back out: to race down remote gold-miner's tracks and eventually to ride out along a deep gorge in dense native forest. Some riders were rumoured to be chased by wild boars, and another was bitten by a particularly territorial river eel.

Pushing my e-bike up unrelenting bush tracks between stages was certainly tough. Crashing at the top of a waterfall and watching my Trek Rail tumble 20 meters end over end down the fall with my mate laughing in hysterics above me was actually (in retrospect) one of my many top moments. One thing for sure is the Trek Rail is unbreakable, other than a few cosmetic scratches it's ready to sell as a demo (hardly used, one careful owner).

Our friendly bus driver Alistair knew his crowd well, and dropped into the first pub en route back to base to grab 3 cases for the drive, creating New Zealand's first mobile pub in the process. This could catch on...

Bob Lowe rehydrating Chris Kelly at the Heckle Zone!

DAY 6 NELSON CITY

IS IT TOO LATE TO QUIT NOW?

In another refreshing change of logistics, Day 6 saw us set off on-bike (rather than in-shuttle) directly from the heart of Nelson, leaving The Rutherford Hotel after a rather posh 4-star breakfast to embark on one last journey through Nelson's stunning backcountry. The organisers were keen to start and finish the day right from the city centre. It quickly became evident why Nelson's MTB club is the biggest in NZ with over 3000 active members. That said, with 800m of elevation directly behind the town, after the first

'warm-up' stage we were very glad to be met by The Rally's now very familiar fleet of 4x4 buses and shuttles.

I was feeling more cooked than my brake pads having hung on with a death-grip for way more than 4 hours of non-stop descent.

To celebrate my achievement and the end of this 6-day epic adventure, we cracked a few local Stoke Beers and cheered the pro-riders home around the final jumps of the 2025 NZ MTB Rally stage, followed by a BBQ and swim in the local swimming hole at the edge of town. There's next level riders and next level trails; in Nelson we got to see both. The Nelson Council, local businesses and mountain bike community have created an amazing mix of trails and services which should be on the top of every mountain biker's bucket list. We will most definitely be back.

THE GRAND FINALE

I'm not sure I've ever seen someone celebrate achieving 5th place in a race with such intensity, but such is the life of being the highest ranked Lowe-Bro, where physical talent is in short supply and expectations of a decent race result are even lower. At the end of 6 huge days of racing well above his paygrade, and emerging victorious over not just his two brothers, but four other mates: For eternal bragging rights, Bobby 'Ricciardo' Lowe celebrated 5th place like an absolute boss – firing up the crowd and downing the first shoey of the night! I'm proud of you, mate!

Bob Lowe celebrating 5th place overall – Regular course

SEE YOU NEXT YEAR?

Would I do it again? If you had asked me on the morning of Day 6, it was a definite no! To be honest, I contemplated abandoning the bike at the bottom of that waterfall on Day 5 for more than a minute, so the thought of reliving this adventure wasn't at the top of my priorities at that particular moment.

What makes the NZ MTB Rally so good is that you can classify a day like the heli-bike day as both the best and the worst day of the event. I only say 'worst' due to the huge accumulation of kilometres and therefore fatigue, plus the introduction of bike-hiking up 400m vertical in elevation. In retrospect, the adventure of flying into the backcountry, racing down trails that few others have done before, bike-hiking into Grade 4 and 5 trails and finishing off swimming in cool New Zealand mountain water with a chilled beer in hand and all shared with a great crew of people...it really can't get better!

We will definitely be back to Nelson for another MTB trip sometime soon. The variety and length of the trails matched with the natural beauty of the Nelson Tasman region and the warm hospitality of the locals – it's hard to beat. For anyone that rides Derby, Maydena, Whistler or Queenstown: Nelson is more than worthy of adding to your bucket-list.

The organisation and management of the NZ MTB Rally was high class, as a rider we felt like everything was under control the whole time. Gabi – Rider Hospitality manager and basically everyone›s mum for the week, deserves a big wrap for this. The mixture of areas gave us a good cross section of what Nelson/Tasman has to offer, and the style and superb social atmosphere of the event has helped us come away with new riding mates on the Sunshine Coast and Canberra as well as from further afield and overseas.

It was definitely harder than I expected, to ride 10–15-minute Grade 4, 5 and 6 trails 'blind' in race conditions leading to plenty of hit it and hope scenarios throughout the week. Not that it will help, but when you are there on the start line with the red-mist descending, I definitely recommend taking Ali's advice and approach the first day at 80%...not 110%!

LOCK IT IN, LEGENDS — MARCH 14 TO 21, 2026! REGOS OPEN IN AUGUST, AND SPOTS WILL PROBABLY GO QUICKLY!

NZMTBRALLY.COM

FOXFIRE & GRAVEL TRAILS BEYOND THE ARCTIC CIRCLE

PHOTOS & TEXT MARTIN BISSIG
WWW.BISSIG.CH

Smoke scratches at our lungs as the flames of the fire flicker in the eye of the stuffed raven. The sharp teeth of the dried pikefish seem ready to snap any second, as a loud noise from the darkness reverberates through the small cabin where we're seated in a circle.

The door creaks open, and in steps a towering man, dressed in leather and fur. "Long, long ago, giants lived here and hurled stones – boulders as big as houses," he begins, his voice deep and slow. We're visiting a shaman somewhere in the wilderness of Finnish Lapland, far above the Arctic Circle. We listen intently to his stories. "Do you know where the Northern Lights come from?" the healer asks us. We don't, but we've got a full week to find out for ourselves.

Our base is the small town of Levi. From October to April, this place is a winter sports mecca for athletes – snow and subzero temperatures are guaranteed. Now, in late autumn, the town feels deserted. The temperature and weather forecast, however, promise ideal conditions for our gravel biking exploration. I'm joining twin sisters Caro and Anita Gehrig on their adventure. In the mountain biking scene, these Swiss sisters are well-known and rank among the best enduro racers on the planet. Since opening their own hotel last year, they've cut back on racing. "Now we have more time for cool projects like this," Caro laughs. Multi-day rides covering hundreds of kilometers are nothing new for these former pros, and I didn't have to do much convincing to get them onboard with my plan to explore northern Finland on gravel bikes.

Äkäslompolo 4
Kotamaja
Karila 2
4 Kotamaja
3 Kukastunturi
(20) Kukastunturin kierros
46 Levi
Äkäslompolo 4

LAPLAND: MADE FOR GRAVEL BIKES

Our first loop starts in Yllas. Just a few kilometers in, it's clear that the trails we're riding, which are used by hikers and bikers in the warmer months, double as cross-country ski tracks in the winter. We climb steadily on wide, rugged paths up to the highest point of the fell. From just under 400 meters above sea level, we have a perfect view of the area. The nearest ski resort rises a few hundred meters higher, standing out against the flat landscape. Forests stretch as far as the eye can see, with only occasional signs of civilization in the form of log cabins or small villages. We switch from wide gravel paths to narrow singletrack winding through the forest.

"Now I get why blueberry juice is Finnair's signature drink," Anita shouts to me from the bushes. She's parked her bike against a tree and is crouched down, munching on blueberries. The berries are everywhere – a seemingly endless supply of free vitamins, right alongside the best trails. Our well-deserved break not only fills our stomachs but also turns our tongues blue-violet. But we don't have time for a long pause; the sun, which hangs low all day this time of year, is slowly approaching the horizon.

We want to reach a lakeside fire pit in the national park by nightfall. Riding on sandy trails, we arrive at the beach after a few more kilometers. The last rays of sunlight filter through the yellow-brown leaves, bathing the scene in a warm, golden glow. We couldn't have picked a better spot to cook our salmon over an open fire.

As darkness falls, we gaze expectantly at the night sky. “Do you think we’ll see the Northern Lights tonight?” Anita asks. Chances aren’t great, as clouds are moving in. Sadly, the twins’ wish to witness the natural phenomenon didn’t come true that evening. Luckily, we still have a few nights left.

DOWNHILL TRAILS ON GRAVEL BIKES

Levi is home to one of the northernmost bike parks in the world. The trail crew kindly invites us to try it on downhill bikes, but the sisters politely decline. “If it’s doable on downhill bikes, it should be doable on gravel bikes too,” they suggested back in Switzerland. So, we leave the full-face helmets behind and hit the ‘Santa Claus Hut’ trail on skinny tires with saddlebags. And it turns out: the track is well maintained and, even without suspension, totally manageable – especially for former enduro pros.

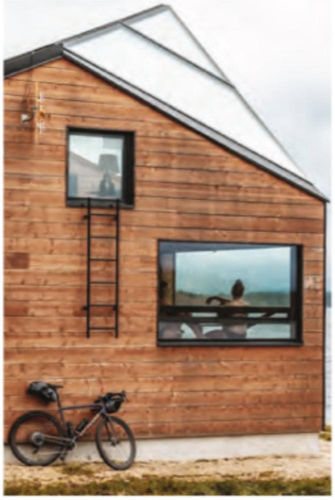
A few steep berms and wooden ramps later, we come across an old hut. It doesn’t just look like a movie set; it actually is one! One of Finland’s most famous Christmas movies was filmed right here, long before the nearby bike park jumps were built. “This is exactly how I pictured Finland,” Caro says, snapping a photo of her sister in front of the hut.

The weather is also unusually kind to us. The strong wind has temporarily shut down the lifts, but it’s also blown away the clouds and bad weather. While people back home in central Europe are welcoming the first snow, we’re riding in t-shirts at over 20 degrees Celsius, far above the Arctic Circle in autumn. Crazy weather!

FROM SAUNA TO SHAMAN

A sauna visit is a must in Finland. There are about half as many saunas in the country as there are people, which means not only does every household have one, but so does every forest hut and holiday cabin by a lake or river. We experience firsthand that not all saunas are the same at Arctic Sauna World.

This public facility offers themed rooms representing the elements: fire, water, earth, and air. One thing that stands out to us Swiss visitors immediately: unlike at home, public saunas in



Vaativa lasku
Demanding slope

NOW HALF PRICE!

HARTLEY'S TO PORT MTB RACE

SAT 13 SEPT 2025

Queensland

HARTLEY'S CROCODILE ADVENTURES

DOUGLAS SHIRE COUNCIL

CAIRNS & GREAT BARRIER REEF

PORT DOUGLAS DAINTREE

Cairns REGIONAL COUNCIL

Cairns airport

TOYOTA Pacific Toyota

SHERATON GRAND Mirage Resort Port Douglas

Finland are entered with clothing, not naked. We narrowly avoided a major faux pas, thanks to our guide and friend, Aapo, who gave us a heads-up! In Finland, saunas are social gatherings, like a trip to the beach or pool back home. Three bare Swiss behinds wouldn't have exactly helped with the cultural exchange!

After a refreshing dip in the crystal-clear lake, we're rejuvenated and ready for a spiritual encounter. A genuine Lappish shaman welcomes us for an audience in his log cabin. The lakeside atmosphere couldn't be more fitting. The sun shines dramatically between clouds and the treeline, and a cool breeze whips across our faces.

We sit inside the fire-warmed cabin as the shaman, a little imposing but mostly captivating, shares stories of his ancestors. We learn about his life as a fisherman and hunter and listen to the legend of how the Northern Lights came to be.

"A giant fox prowls through the polar winter forest, its tail sweeping side to side. The sparks it creates fly into the sky and appear as the Northern Lights, which we call 'Foxfire,'" he explains in a deep voice. "If you'd like, I can call upon the spirits and try to wake the fox," he adds.

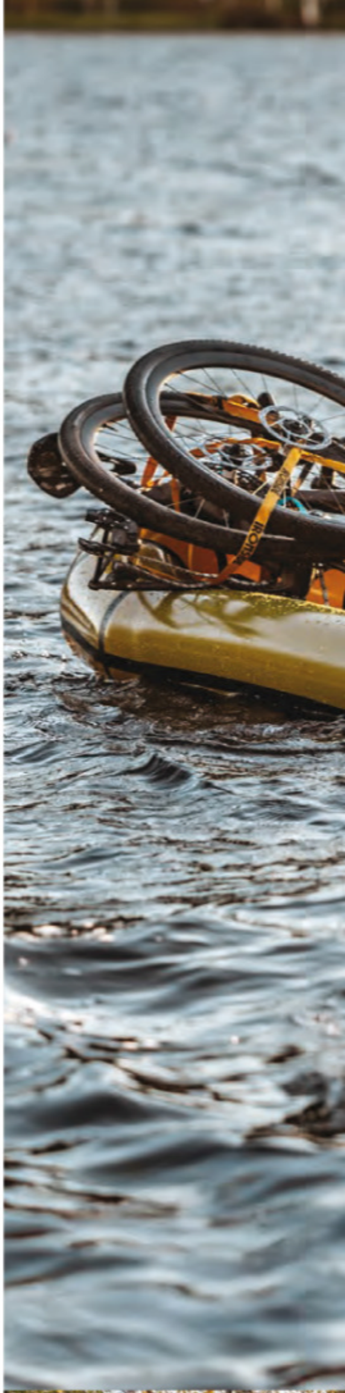
"Absolutely. Let's go outside and see if it works," Anita replies eagerly. The shaman drums and murmurs, blowing glowing embers toward the ceiling with his eyes closed. A few minutes later, we step out into the night and stare at the sky. What initially looks like a veil of clouds reveals itself in the deepening dark as a faint aurora. Not especially bright, but there. "Must be a little fox," Caro laughs. Let's hope we see larger foxes in the nights to come.

PACKRAFTING – THE RIGHT WAY!

The following days are spent seeking out the best gravel trails. Aapo has already shared some of his favorite GPS routes. The Gehrig twins don't mind the occasional hike-a-bike section if it means uncovering trail gems that likely haven't seen many gravel tires.

We cross bridges and pass deep blue lakes, even wading barefoot through knee-deep streams at times. "There's probably no better place to combine packrafting with biking," Aapo tells us as he inflates the small boats. Rather than riding around a medium-sized lake, we decide to paddle across.

The inflatable kayaks are new territory for Anita and Caro, but with their compact pack size (about as big as a small sleeping bag), they're perfect for land-and-water adventures. Even as paddle novices, they have the boats ready in minutes. After dismantling the bikes and securing them with straps, we're ready to set sail! The twins love it after their water baptism. "Can we do this again tomorrow?" they ask Aapo. No problem in the land of rivers and lakes! The next morning, we paddle 10



of rivers and lakes! The next morning, we paddle 10 kilometers downstream and ride back to our cabin.

THE FOXFIRE BURNS BRIGHT

My Aurora app forecasts an excellent chance of seeing Northern Lights on our final evening. A clear sky and high solar storm activity create ideal conditions.

After our last dinner together, we keep our eyes glued to the night sky. A faint green glow appears. Tonight might be the night. We drive to the highest, darkest point in the area – the summit of Levi's ski resort. And sure enough, as the night deepens, the Aurora Borealis begins to dance.

We walk the last few meters on foot, surrounded by flickering lights. "Look here! And there! And over there!" I shout excitedly. Although it's not my first time, the spectacle never loses its magic. The sisters are speechless. We couldn't have asked for a better end to our gravel adventure. The Gehrig twins' wish to see the Northern Lights for the first time has come true. Whether it was thanks to the shaman's magic words is up for debate. But one thing's for sure: Finland has cast its spell on us. The rugged nature, endless trails, welcoming people, and – last but not least – excellent reindeer steaks make it a place worth visiting, with or without the Northern Lights.

BEST TIME TO VISIT: The ideal months for gravel biking adventures are June through September. Temperatures are pleasant, though there are many mosquitoes from June to mid-August. Northern Lights sightings are more likely from September onward, though temperatures are cooler.

GETTING THERE: The region is accessible via airports in Kittilä, Rovaniemi, and Ivalo. From there, Levi can be reached by bus or rental car. International flights usually connect through Helsinki.

CLIMATE: Lapland has a subarctic climate with short, mild summers and long, cold winters. In autumn, daytime temperatures often range from 5–15°C, while nights can drop quickly.

CURRENCY: Finland uses the Euro. Card payments are widespread, even in remote areas.

COSTS: Finland is generally a bit more expensive than other European countries. Expect to budget around 100–150 euros per day for accommodation, food, and activities.

GUIDED GRAVEL TOURS: Swiss tour operator BIKE ADVENTURE TOURS offers guided gravel trips to Finnish Lapland: bike-adventure-tours.ch/reisearten/gravel-reisen/

BMTI

BICYCLE MECHANIC TRAINING INSTITUTE

LEARN THE RIGHT WAY

Bicycle Service & Repair Courses

AUR20320 - Certificate II in Bicycle Mechanical Technology

AUR30220 - Certificate III in Bicycle Workshop Operations

For more info visit
www.bmti.com.au
or call 02 4722 2471

5STAR
Training & Consulting

RTO ID 91664

the hub

TESTED

There's a world of choice in bikes and bike parts out there. Our test team put bikes and products through the works.

90 Trek Rail+ 9.8
94 **Santa Cruz** Hightower
99 Specialized Turbo Levo Pro
104 Shimano XTR Di2
108 SRAM Eagle 90
110 SRAM Motive Ultimate
112 Pure
114 Wahoo
116 Granite Stash
118 StokedNZ Towelies
119 Rimpact

THE HUB

The where, what, how and when of mountain biking, from industry professionals.

120 Nutrition
122 Fitness
124 Skills
126 Workshop

deuter
deuter
deuter
ROGLA 5

GERALD ROSENKRANZ / FLATLANDS 300

TAKING COMFORT TO EXTREMES

Comfort isn't usually the first thing you think of with gravel biking. But the new Rogla 5 has your back. It's lightweight, streamlined for full freedom of movement, and takes care of your hydration on long, tough rides.

TREK
RAIL+ 9.8

TREK'S NEW ALL MOUNTAIN MULLET E-BIKE DELIVERS A PERFECTLY BALANCED ALL-DAY RIDE.

TESTER **ANNA BECK** / PHOTOS **GERARD LAGANA**

The Trek Rail is Trek's workhorse e-bike. The last generation of the Rail featured a 29" platform with the full-powered Bosch CX motor and 160/150mm travel. While it performed well across a range of applications, it wasn't a standout performer in any one. This all changed with the launch of the new fifth-generation Trek Rail+, which has been redesigned to let you ride longer, on more technical trails, and more comfortably.

THE NEW RAIL+

The Rail+ is equipped with the Bosch CX Generation 5 motor, paired with an 800Wh battery, a mullet setup across all sizes (excluding small, which is a full 27.5" bike), 160mm travel front and rear, and an updated RIB 2.0 battery latch system. The two models available at this stage – the 9.8 (tested) and the 8 – represent Trek's OCLV carbon and alloy frame options respectively. This new 160mm mullet platform gives the Rail+ a fresh, aggressive silhouette that's ready to rip on the trails.

The increased battery capacity of the new 800Wh Bosch PowerTube, along with compatibility with the Bosch PowerMore 250 range extender, means the Rail+ is primed for all-day backcountry adventures. In our experience, mullet (or MX) setups thrive in steep and deep terrain and off-piste adventures, so we expect the Rail+ to shine on those lesser-known, highly technical trails often spoken of in whispers rather than shouts.

With a claimed range of 4–7 hours depending on terrain, the new Rail+ seems like the perfect companion for alpine adventures and big-mountain rides. While the bottle cage fits a small bottle, it also houses the Bosch PowerMore range extender, so riding with a pack is a must for

all-day epics. If you're planning to use the full 1050Wh of battery-delivered energy, you're going to need more snacks and water than one bottle can carry anyway!

The Rail+ comes with both the Bosch System Controller on the top tube and the bar-mounted Mini Remote, replacing the Bosch Kiox head unit found on previous generations. The full feature set of the Kiox is still accessible via the Bosch Flow app.

GEOMETRY TWEAKING

The Rail+ offers a diverse range of ride experiences thanks to its adjustable geometry, featuring a Mino Link and angled headset cups (available separately). The Mino Link, located on the top pivot, ships in the low setting. Switching to high steepens the geometry by 0.5° and increases bottom bracket drop by 7mm. For example, the head tube angle shifts from 64.5° in low to 65° in high, a change that noticeably affects handling. Additionally, the angle-adjust headset cups allow for a further 1° adjustment in either direction without affecting bottom bracket height, similar to Trek's Slash model.

With a 450mm reach on our size Medium, the Rail+ sits comfortably in line with other bikes in this category, especially considering that the 'long and low' trend is starting to come full circle.

INITIAL IMPRESSIONS: BIKE & SETUP

Picking the bike up from our local Trek dealer, getting ready to ride was as simple as setting my position, dialing in the suspension settings, and linking to the Bosch Flow App.

The Rail+ is the first bike I've personally tested with the new-generation Bosch CX Performance Line drive unit and SRAM GX Eagle Transmission.

At first glance, the Rail+ 9.8's stealth black colourway is an understated crowd-pleaser. Matte silver decals and what I've dubbed 'sealant splatter' graphics on the rear triangle add a creative flair. Our Rail+ was shod with Bontrager Brevard RSL SE tyres, and SRAM Code Bronze brakes provided the stopping power.

Frame-wise, the downtube is all brawn, housing the 800Wh battery. A key upgrade here is the RIB 2.0 battery latch system, which is accessed with an 8mm Allen key and this resolves the rattle issues from previous generations.

A major change to the Rail+ is the platform: moving to a mullet setup with increased rear travel to 160mm. This signals more than just an evolution – it's a full-blown reimagining of the model. My main criticism of the previous Rail+ was that it felt more like a plower than a player, so I was curious to see how this new version would perform on my local

mix of steep scree and more moderate bike park flow.

That said, an initial minor complaint: the dropper lever. Why do we continue to see poorly specced dropper posts and levers on bikes of this calibre? The bike may be specced with SRAM Eagle GX rather than top-tier drivetrain, but it's also equipped with a Fox Performance Elite Float 38 fork and Fox Performance Elite Float X shock. Fitting a cable-activated Bontrager Line dropper with a flimsy plastic lever feels below par.

Thankfully, the gripes end there. The rest of the Bontrager components suit the bike well. The Bontrager Verse Short Comp saddle is a crowd-pleaser with its inoffensive short-nose design. The Line Pro stem (45mm) and Line Pro carbon bars (780mm) make for a comfortable, upright cockpit.

The Bontrager Line Comp 30 wheelset might be a future upgrade point for some. A robust, tubeless-ready alloy wheelset, they weigh over 2kg. But hey—that's why you've got a Bosch Performance Line CX motor, right?

ON THE TRAIL

On my first ride on the Trek Rail+, I was immediately impressed with how agile a full-weight, full-powered e-bike could feel. This is partly due to the bike's balanced and playful geometry, and partly due to the sensitive, natural power delivery from the Bosch Performance Line CX system. Unlike many e-bikes I've tested, the Rail+ feels flickable – it encourages you to hop, whip, and jump your way down the trail instead of simply smashing through with brute force.

That said, there's plenty of brawn available. The CX unit's 85Nm torque is quick to engage and responsive to minimal rider input, without feeling overly surgy. Bosch has nailed the natural ride feel – even in their full-powered systems – and that's a big deal.

I rode the Rail+ alongside another e-bike with Shimano's EP-801 and swapped between the two mid-ride. The difference in motor noise was noticeable. Bosch has made strides in reducing noise at low support levels, but it's still more audible than Shimano's motor when just cruising. Is this a dealbreaker? Probably not. The Bosch's output isn't loud – just a soft, consistent whir.

Interestingly, when power ramps up, Shimano gets louder, while the Bosch CX remains relatively quiet. Bonus points: I didn't experience any of the unsettling clunk that plagued earlier generations of the Bosch motor.

In terms of raw power, the CX isn't the most muscular drive unit. Its 600W peak and 85Nm torque fall short compared to the DJI Avinox M1 (850W, 105Nm) or the latest Specialized Levo (720W, 111Nm). But Bosch remains a standout for ride feel. If you're racing e-bikes, maybe go for a higher-output motor – but for most riders, the feel of the Bosch CX is unbeatable. Since this review, Bosch have announced a performance upgrade for their CX systems, including an increase of up to 750W and 100Nm torque!

The Bosch system feels intuitive. While more powerful motors exist, many deliver torque too abruptly. The CX manages to feel like an extension of your legs. It's especially noticeable when approaching the 25km/h

cutoff – the CX doesn't suddenly drop off like others. Instead, power fades out smoothly and naturally.

Of course, the motor isn't everything. The SRAM Eagle GX drivetrain ran flawlessly. I did find the Code Bronze brakes lacking bite during early testing, and overall found them perhaps underspecced on a full-powered, ~25kg e-bike. I think that given the heft and capacity of the new Rail+, it's worthy of a set of Mavens for superior stopping power.

And yes – that dropper post lever (not the Bontrager Line dropper itself, which performed reliably) continued to underwhelm with sluggish, inconsistent action.

The cockpit was comfortable from the outset, though the bars have a slightly unusual rise and sweep that may limit angle adjustment options. In a neutral setup, I had no complaints.

Throughout testing, I rode the Rail+ on everything from rutted double track to muddy moto trails to flowy bike park lines. The difference between this and the previous generation is stark. The hefty Rail+ handles like a lightweight trail bike, yet feels like it has bottomless suspension. It's one of the most playful 160mm bikes I've ridden – despite its hefty weight.

It devours steep descents with ease, but still responds with minimal input in tight corners; a small weight shift is all you need to redirect your line. In the air, the weight takes some getting used to, but it exceeded my expectations on the local jump line and performed far better than its predecessor.

Battery life with the 800Wh pack was phenomenal. I managed nearly 70km and 2000m of climbing on a single charge – mostly in eMTB mode, with some Turbo on steep pinches.

One thing to note: the Bosch System Controller changes color as the battery depletes and disappears entirely when critically low. When you hit two bars (about 40%), it turns red – an effective (and slightly terrifying) reminder to get home. The Flow app and third-party devices like Garmin or Wahoo can give a more precise battery life indication while on the move.

FINAL THOUGHTS

The new Trek Rail+ is a fantastic addition to the Trek lineup. I was genuinely surprised by how much the switch to a mullet platform changed the essence of the bike. At $11,999, the Rail+ 9.8 isn't cheap – but it's not outlandishly priced compared to other carbon offerings.

I'll admit, I was a mullet skeptic – do we really need another wheel combo? But for a full-powered, all-mountain e-bike, I now believe a mullet setup offers the best of both worlds: the lively, playful feel of a trail bike, with the capability of something much bigger. What more could you want?

Essentials

RRP $11999

WEIGHT 24.9kg (medium)

AVAILABLE SIZES S, M (tested), L, XL

FRAME MATERIAL OCLV Carbon

FORK Fox Performance Elite Float 38, Grip X damper

SHOCK Fox Performance Elite Float X

SHIFTERS SRAM AXS Pod

DERAILLEUR SRAM GX Eagle AXS

CRANK SRAM GX 160mm

MOTOR Bosch CX gen 5

BATTERY Bosch PowerTube 800Wh

CHAIN SRAM GX Eagle

CASSETTE SRAM Eagle, 10–52t

HUBS Rapid Drive 108

SPOKES Stainless steel

RIMS Line Comp 30 aluminium

TYRES Bontrager Brevard RSL SE, 29/27.5”x2.5 tubeless ready

BRAKES SRAM Code Bronze

ROTORS SRAM 6-bolt, 200/220mm

STEM Bontrager Line Pro 35mm, 45mm length

HANDLEBARS Bontrager Line Pro, OCLV Carbon, 780 mm width

SEATPOST Bontrager Line Dropper 34.9mm, 170 mm travel (medium)

SADDLE Bontrager Verse Comp short

www.trekbikes.com

Elle De Nooyer

RIDING EXPERIENCE:
3x National Champion and a 3x Oceania Champion in gravity disciplines, enough said!

GENERALLY RIDES:
Trek Slash 9.8

HEIGHT: 160cm

WEIGHT: 54kg

BIKE TEST TRACK: Jubilee Park MTB Trails, Toowoomba

SANTA CRUZ
HIGHTOWER XO AXS

THE MOUNTAIN BIKER'S DO-IT-ALL RIG GETS A MAKEOVER

TESTER **ELLE DE NOOYER** | PHOTOGRAPHER **CLANCY KELLY**

The Santa Cruz Hightower is a familiar face in the world of trail bikes. Launched in 2016 as an evolution from the Tallboy LT, the Hightower is the 135mm, do-it-all trail bike for the discerning mountain biker. In 2025, Santa Cruz has revised the crowd favourite to accommodate more aggressive geometry with 160/150mm of travel.

At the top end of the Hightower family, I tested the Hightower XO AXS model. The Hightower continues to evolve as a true all-round trail bike, with its latest design further emphasising its versatility. The updated geometry has been carefully refined to improve descending performance, giving riders more confidence and control on steeper, more technical terrain – all while staying true to the Hightower's roots as a do-it-all trail machine. This bike compares directly to the Forbidden Druid in terms of a high-end trail bike designed to be both confident and fun descending and efficient climbing. The Santa Cruz, however, has more travel but is similar in price.

One of the most notable changes in the latest generation of the Hightower is the relocated rear shock. The shock now sits lower in the downtube than its first two generations, recessed within the frame, opening up space above the bottom bracket. The lowered shock blends smoothly into the overall design and allows responsiveness in the rear, without compromising the Hightower's pedalling efficiency. While the lowered shock was present on the last generation of the Hightower, Santa Cruz again modified the horizontal placement slightly. This new layout gives the frame a sleek, integrated look and serves a functional purpose in the bike's performance, while retaining Santa Cruz's time-tested VPP platform. This isn't just about aesthetics – Santa Cruz has engineered this update to improve the way the bike rides. The revised setup claims to reduce pedal kickback, boost traction, and optimise the suspension's responsiveness.

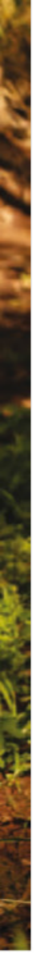
Adding to its capabilities, the rear travel has been bumped up to 150mm, giving the bike more ability for rough trails and more technical descents. Despite all the changes to the frame, Santa Cruz has stuck with their much-loved in-frame storage compartment, the Glovebox, providing riders with convenient space for tools, snacks, or spares without needing to strap anything to the frame.

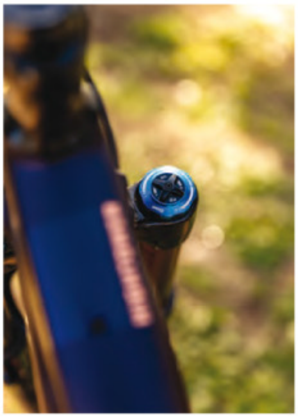
INITIAL IMPRESSIONS

I was especially impressed by the build of the Hightower, which meant the overall weight of the bike was feathery at 14.01kg. This is partly thanks to the SRAM XO AXS groupset, SRAM Maven brakes, and a carbon frame and handlebar setup; the bike felt impressively light without compromising performance. The Reserve alloy wheels deserve special mention – they held their compliance through the rough, rocky terrain on my local Jubilee trails, and gave the ride a stable, confident feel.

Although the SRAM Maven Silver brakes and XO AXS drivetrain are only marginally better on paper than their lower-tier counterparts, on the trail they delivered a noticeably smoother, more refined experience. Shifting felt effortless, and the braking with the Mavens was robust and consistent – no complaints here.

As someone who typically rides a size small, I often find that manufacturers lower the top tube to accommodate shorter standover heights, which can mess with





the geometry and aesthetics. That said, I was pleasantly surprised by the standover height on this model – it felt well-balanced and didn't compromise the bike's overall look or feel.

One detail I picked up on quickly during descents was how high my feet felt off the ground. This could be due to the bottom bracket height or overall frame layout, and while it took some getting used to, it didn't take away from the bike's descending performance. Overall, the Hightower delivers a lively, well-rounded trail experience that's made for riders who love to ride hard, climb efficiently, and keep things fun.

As far as set-up went, I made no changes out of the box. It is worth mentioning that the Hightower has a high/low geometry flip chip, which comes set up in the low setting that equates to a head tube angle of 63.9. Flipping to the high setting steepens things up to 64.2, and also brings the seat tube angle to 77.6 from 77.3 in the low setting. While this seat tube angle may seem a little on the slack side, Santa Cruz have ensured longer riders won't be off the back, with the angles tightening up to 78.4 in high setting in the XXL sizing.

Suspension-wise, I settled on 67psi, 8 clicks low speed and 7 clicks high speed compression in the Fox 36 Float Factory fork, and 145 psi with 7 clicks rebound in the rear shock.

ON THE TRAIL

I'd describe this bike as an enduro–trail hybrid. The slack head tube angle gives aggressive enduro-rig vibes, while its light overall weight and pedalling efficiency mean it retains the agility of a trail bike. These characteristics make it a versatile choice for riders who want to push hard on descents without sacrificing too much on the climbs.

One of the standout features for me was the pedalling efficiency. I was genuinely impressed – I never felt the need to reach for the suspension lockout. Even on long, sustained climbs, the bike maintained a firm and responsive feel under power, which speaks volumes about the suspension design and overall setup.

On technical climbs, the bike really came into its own. It charged over roots, rocks, and

step-ups with ease, delivering plenty of traction and stability when things got tricky. Even on flatter, more gradual ascents, it rolled smoothly and held its momentum well, making it a strong performer in a variety of climbing scenarios.

Another point worth highlighting is the comfort factor on longer rides. After pushing past the four-hour mark on several rides, I found the bike continued to feel comfortable and efficient. When set up correctly, it does a great job at reducing fatigue, allowing you to stay fresh and focused on the trail.

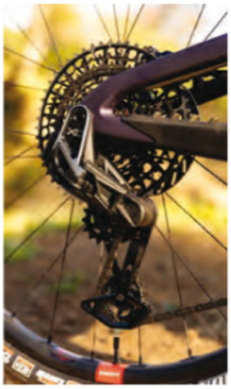
In terms of handling, I'd call the Hightower optimally balanced. When giving it the beans it responds well to rider input, holds lines nicely, and feels predictable through corners. However, at very high speed it tends to lose some composure in rough terrain. While it's still capable, riders who frequently ride rough and janky downhill-style descents might notice things can tend to get a little too loose in those moments.

Another thing to note, I absolutely struggled on tight sections of track. As a smaller rider, I grappled as to whether it is due to the Hightower's 29" wheels, 1205mm wheelbase, or both. Normally I don't experience this at all on small bikes so I was a bit surprised when I had this problem. Notably, the wheelbase is on par with others in this category, a little longer than the Forbidden Druid but by only a few millimetres.

Despite this minor quibble, this bike was impressively poppy and responsive for a full 29er with 160mm of travel. It felt light off the ground and climbed with surprising efficiency – traits you don't always expect from something with this much travel. It's designed for riders who want to get the most out of every section of trail while having an absolute blast doing it.

What stood out was how much fun this bike was on flowy singletracks. It's fast, playful, and tuned for that style of riding. While it could feel a bit too lively, requiring a bit more input to stay grounded on rougher terrain, the

SANTA CRUZ
MAXXIS
FOX



MAXXIS
SANTA CRUZ
MAXXIS

THE BEST
OF BOTH
WORLDS.

30|SL F - 30|HD R Frysauce

Mixed Rim Carbon Trail and Enduro Wheels

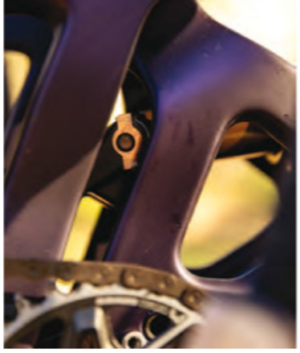
Like mixing ketchup and mayonnaise to create the perfect french-fry accoutrement, the perfect wheelset may require combining seemingly disparate things. In this case, it's our venerable 30|SL and 30|HD, built into the respective front and rear wheels to provide the perfect combination of compliance and stiffness for your trail riding pleasure. It's the wheelset we ride most, and starting today, you can too!

Unrivaled Quality | Technically Superior | Lifetime Warranty

Designed in Santa Cruz, California.

RESERVE

www.reservewheels.com



trade-off was a bike that felt engaging and energetic in the right conditions.

OUR TAKE

Suppose you're after a mountain bike that can handle almost everything. In that case, the latest version of the Santa Cruz Hightower proves its worth as an extremely capable, efficient, and versatile trail bike. It's the kind of bike that could efficiently serve as your only ride, no matter the terrain or type of trail...as long as you understand its limits when the going gets very rough and technical. That all-around ability is where its real value lies.

Yes, the price tag is higher on Santa Cruz bikes, but that comes with some solid justification. This Hightower isn't just another trail bike – it's a unique product. You can see the attention to detail and thoughtful design choices that went into the new Hightower, and for riders who care about performance, those considerations make a big difference.

For anyone in the market for a high-end, do-it-all mountain bike with robust and reliable components, this one stands out. It's packed with quality parts and built for riders who want confidence in their gear across a wide range of riding types and trail conditions.

It's worth remembering that this is a trail bike, not an enduro bike. While it might reach its limits on the most aggressive descents, that's not what it was designed for. And honestly, within its intended purpose of general trail riding, fast flow trails and less aggressive gravity trails, Santa Cruz has nailed it. The Hightower delivers exactly what a trail bike should: versatility, balance, and capability in a finely tuned package.

Essentials

BRAND Santa Cruz

MODEL Hightower XO AXS

RRP $12,499.00

WEIGHT 14.01kg (as tested)

AVAILABLE SIZES S, M, L, XL, XXL

FRAME MATERIAL CC carbon fibre

FORK Fox 36 Float Factory 160mm

SHOCK Fox Float X Factory shock 150mm

SHIFTERS Sram AXS pod

DERAILLEUR Sram XO Eagle AXS 12spd

CRANK Sram, XO Eagle DUB 32t

BOTTOM BRACKET Sram DUB

CHAIN Sram XO Eagle T-Type

CASSETTE Sram XO Eagle 10-52t

HUBS Industry Nine 28h

RIMS Reserve 30ISL alloy

TYRES Maxxis Minion DHF and DHR II

BRAKES Sram Maven Silver Stealth

STEM Burgtec Enduro stem, 42mm

HANDLEBARS Santa Cruz, 35.0 carbon bar, 800mm

SEATPOST OneUp, 31.6mm

SADDLE WTB Silverado medium

santacruzbicycles.com

Ryan Walsch

RIDING EXPERIENCE: Repairing, racing and breaking bikes since forever

GENERALLY RIDES: Forbidden Druid, Trek e-cargo

HEIGHT: 178cm

WEIGHT: 74kg

BIKE TEST TRACK: Canberra's finest pine forests

SPECIALIZED
TURBO LEVO 4

WHERE SUPER MEETS NATURAL

TESTER **RYAN WALSCH** / PHOTOS **JORDAN RIDDLE**

It's a bike we've all been holding our breath for, and we've been delighted to have Specialized's new Turbo Levo on test. The new Levo features the 3.1 motor, a mixed-wheel setup with 150mm rear travel, three ways to optimize geometry, GENIE suspension, lower standover height, and the capacity to run a 200mm dropper in the S4 size. The Turbo Levo delivers some of the upgrades we had on our wish list for the new model – but let's dive into the bike more below.

The Australian market will receive four models of the new Levo, including an S-Works model and an S-Works frameset.

The S-Works, as expected, comes with a blingin' build, leaving nothing wanting. The Specialized FACT 11m Carbon frame is used throughout all four models, but the S-Works also sports carbon linkage to keep the grams down. As mentioned, this model comes with the 3.1 motor boosted to a peak power of 720W with 111Nm of torque at your disposal. The S-Works model is available in Gloss Glacial Metallic and Gloss Red Pearl colourways.

Our Turbo Levo Pro model features the 3.1 motor with 666W peak power and 101Nm torque, which is mirrored across the remainder of the range. The Pro model features the same suspension as the S-Works model, however it downspecs the drivetrain to SRAM Eagle XO, brakes to Maven Silver, and hubs to DT Swiss 350s.

The Levo Expert and Comp models feature a further step down in suspension, with the Fox 38 Performance Elite GRIPX2 and GENIE Fox Float X Performance Elite, and Fox 36 Rhythm GRIP and GENIE Fox Float X Performance, respectively. The Expert features SRAM Eagle GX, while the Comp model uses the S1000 drivetrain—both with alloy wheelsets and Silver and Bronze Maven brakes.

JUICE UPGRADE WITH THE 3.1

The heart and soul of the new Levo is the completely new 3.1 motor, which boasts a whopping 27% increase in peak power. The 3.1 features a near-flat power curve from 70rpm to 120rpm, ensuring you can make it up any pinch or feature the terrain throws at you. Specialized states that they've done field testing and that this power delivery profile means that in steep, slippery, or technical climbs, the nearest competitor failed to ride the section twice as often as the Levo 4.

The new 3.1 motor differs depending on the model it's specced on – S-Works bikes sport a huge 720W peak power and 111Nm of torque, while all other models feature 666W peak power and 101Nm of torque. Specialized has confirmed that the motor on the S-Works and the rest of the range is indeed the same drive unit, simply

configured differently for each bike. This is a modest increase from the 2.2 motor on the previous Turbo Levo, which featured 90Nm torque with 565W peak power.

The new 3.1 motor is claimed to set the standard in efficiency, with its 1:27 gear ratio allowing the motor to run at higher RPMs while reducing battery drain. Specialized claims that the 3.1 features the best range-to-weight ratio of any motor on the market.

BATTERY AND SWAT CAPACITY

Powering the new Levo is a huge 840Wh battery, with a claimed range of up to 5.3 hours when paired with the range extender (for a hypothetical 80kg rider using primarily Eco mode). Specialized also offers a lighter-weight 600Wh battery, as well as a 280Wh range extender, taking the total possible battery capacity to 1120Wh of berg-topping power.

Despite the large battery capacity, Specialized has managed to integrate their patented SWAT downtube storage caddy, located above the battery. The SWAT is retained with a magnet in the headtube, ensuring it stays in place without any incessant rattling.

Entering the battery port to access the SWAT compartment, you can't help but notice the polished finish of the carbon fibre layup. In my history wrenching, unseen surfaces of bikes can often be left a mess, so Specialized's attention to detail inside and out of the frame is top-notch – as we would expect. Furthermore, if you swap out the 840Wh battery for the smaller 600Wh, you'll have extra room in the SWAT compartment for a spare jacket (or mid-ride burrito).

Another notable addition to the new 3.1 motor system is the 5-amp, 200W charger. For time-crunched riders, Specialized is also offering an aftermarket 12-amp, 700W charger that claims a 1-hour charge time from flat to 80%.

GEOMETRY TWEAKER'S DELIGHT

The Turbo Levo features Specialized adjustments such as adjustable head tube angle, bottom bracket drop, and chainstay length. The bottom bracket adjustment reduces the drop by 6mm via a flip chip in the eyelet of the shock, while the headset angle offers a 1degree positive and negative adjustment, for a total of three positions. A third point of adjustment, the chainstay flip chip, allows lengthening of the 435mm chainstay by 9mm.

The S4 on test features a 480mm reach, measuring up alongside most brands' size large. At 178cm, Specialized recommended either an S3 or S4, but I prefer the stability and 1254mm wheelbase of the latter – especially when paired with a mullet or MX setup. If you're after an S1, sorry to say you're out of luck, as the new Levo is offered in S2–S6 for riders ranging from 157–203cm, according to their size guide.

MASTERMIND, MICROTUNE, AND APP INTEGRATION

MasterMind is described as the 'on-board control unit' by Specialized, claiming to be the largest and highest-resolution top tube-mounted screen on the market. Ride data such as charge level, support mode, ride stats, and performance metrics can be connected to devices via Bluetooth. MasterMind pairs with the Specialized app, giving an expanded look at the data displayed on the in-built screen. It also allows you to track the bike with Apple's Find My feature and remotely lock the bike with System Lock in case of theft.

MicroTune is a neat feature that will be welcomed by e-bike connoisseurs – a small dial in the middle of the bar control allows on-the-fly power delivery adjustment. Specialized has also introduced Dynamic MicroTune, a similar concept that uses power increases in 10% increments as an absolute.

ON THE TRAIL

The new Levo is incredibly smooth on the trail – nearly silent and very composed. I am well acquainted with the GENIE air shock from my time onboard the Stumpjumper 15. The huge air volume of two positive air chambers creates a flatter spring curve for the first 70% of the shock's stroke, making it incredibly supple and responsive. The outer chamber closes automatically in the final 30% of the stroke, decreasing air volume and resisting bottom-out with a very progressive spring curve that keeps things in control during dicey moments.

The GENIE shock also features a large slide bushing made by Trelleborg, which drastically reduces wear in yoke-driven suspension designs – a huge bonus.

The Levo's geometry in the S4 size is almost a mirror image of the Stumpjumper 15, only a fraction longer with a 480mm reach (compared to the Stumpjumper's 475mm), and a 1254mm wheelbase, with both bikes featuring a 77 degree virtual seat tube angle. Specialized has steepened the Levo's actual seat tube by removing a bend at its base, increasing seat post insertion by over 60mm compared to the previous generation.

The Levo is very easy to manoeuvre thanks to its short 435mm chainstays and 27.5" rear wheel. I found the ride more composed and stable at speed and on technical climbs when I flipped the chainstay chip, lengthening the rear centre to 444mm. This allows the bike to operate in two modes: calm stability for confidence on rowdier trails, and a more playful feel on flowy terrain.

Hoop-wise, Specialized has paired a set of Roval Traverse HD hookless carbon rims with DT Swiss 350 hubs. A 28-hole front, 32-hole rear and lower-profile carbon rim result in vertical compliance that adds to the smooth, planted feel on the trail. When pushing hard, I did find they had a tendency to squirm – straight-gauge or e-bike specific spokes could help here. A small thing, but worth noting for the Clydesdale crew.

On climbs and flat turns, I found that the GENIE shock sank deeper into its travel than expected, resulting in a lighter front wheel, less grip, and a tendency to push through turns. We corrected this with a touch more pressure than recommended in the rear shock and by dropping the stem by 10mm to find a better balance.

SPECIALIZED'S 3.1 MOTOR

While I love selecting Turbo mode as much as the next rider, I also enjoy the challenge of technical climbing. This is where Specialized excels – creating a bike that feels natural on the trail rather than like a mini motorbike. But as they say, power is nothing without control, and Specialized has found a great balance

between the two.

Using MicroTune between about 60% and 80%, in 10% increments proved the best fit for most riding scenarios. The ability to adjust power delivery in 10% steps is a huge advantage – whether you're riding with friends on analogue bikes or seeking better grip and rhythm. MicroTune is also an effective way to manage battery consumption.

The new 3.1 motor, built in partnership with Brose, ditches the belt for an all-metal geared setup. Internally, the gears are twice the size and feature a super-hard coating to reduce wear, friction, and noise.

Our 666W, 101Nm model has similar specs to SRAM's Powertrain motor, which delivers 680W and 90Nm torque. Both feel natural on the trail, but the 3.1 motor – though heavier – has the edge under load with more grunt and less noise for a quieter ride.

Cadence matters to the 3.1 motor: from 20rpm to 70rpm, power increases gradually and then holds flat at max power to 120rpm. This curve helps maintain natural feel without power surges.

The 3.1 motor is formidable in size, sitting low in the frame despite the 350mm bottom bracket height. It's protected by a high-impact sump guard, which I did scrape on occasion as the Levo sinks into its travel. Additional pressure and volume spacers helped keep the bike riding higher – though this goes slightly against GENIE's intent.

In terms of range, the 840Wh battery gave us well over 2300m of elevation gain using Turbo mode only, covering about 45km on a jagged profile. Using MicroTune and Trail mode, 5 hours of ride time is easily achievable on gentler terrain.

Our test bike was almost trouble-free until a momentary glitch: intermittent surges and a red error stating "no battery found" despite the system being powered. A quick off-and-on reset plus a battery reseat fixed it – strange, but non-repeatable.

OUR TAKE

As always, Specialized has nailed the ride feel on the Turbo Levo Gen 4. Its delicate trail touch and composure for a burly, full-powered e-bike are exceptional – and it's incredibly easy to get comfortable on from the start.

I do question the size and weight of the 3.1 motor and Specialized's stance on limiting non-S-Works motor output via software. The option to pay for an upgrade may be welcomed – or resented – by some riders.

Overall, Specialized has answered the call for a more powerful, adjustable, and longer-range bike, and we could definitely get used to having the Turbo Levo Gen 4 in our stable.

Essentials

MODEL	Turbo Levo 4 Pro
RRP	$17900
WEIGHT	23.88kg (as tested)
AVAILABLE SIZES:	S2, S3, S4, S5, S6
FRAME	FACT 11m carbon
FORK	Fox 38 Factory GripX2 160mm
SHOCK	GENIE Fox Float X Factory 150mm
SHIFTER	SRAM AXS Pod
DERAILLEUR	SRAM XO Eagle Transmission
CRANK	SRAM XO alloy
MOTOR	Specialized 3.1 motor
CHAIN	SRAM XO T-Type
CASETTE	SRAM XO 12spd 10–52
HUBS	DT Swiss 350 hubs
RIM	Roval Traverse HD hookless
TYRES	Butcher, Grid Gravity 29x2.3"/27.5x2.3"
BRAKES	SRAM Maven Silver 220mm/200mm
STEM	Industry 9, 40mm length
BAR	RaceFace Era carbon,
SEAT POST	Bike Yoke Revive Max 3.0, 34.9
SADDLE	Bridge Mimic Expert

www.specialized.com/au

USDA
ORGANIC
EXTRA STRENGTH
PICKLE JUICE®
SHOT
FUNCTIONAL ORGANIC BEVERAGE
PURPOSE BUILT FORMULA
The Functional Evolution of Pickle Brine
2.5 FL OZ (75 mL)
Shake well & drink prior to or during exercise

PICKLE JUICE®

A FORMULATED ISOTONIC BEVERAGE

- » Proven to stop cramps in 15-20 seconds
- » 10x more electrolytes than sports drinks
- » 100% organic

SHOP NOW

☎ 0448 800 376
www.picklepower.com.au

Tested

SHIMANO'S NEW XTR DI2 GOES FULLY WIRELESS

WE TAKE A LOOK AT THE NEW XTR AND RYAN GETS A FIRST RIDE ON THE NEW GEAR IN WANAKA

In a bold step that redefines electronic mountain bike drivetrains, Shimano has unveiled the XTR M9250 Di2 – a wireless system that's not just faster and cleaner, but tougher, smarter, and more adaptable to the wild demands of modern trail, enduro, and cross-country riding.

This isn't just a drivetrain update – it's a quiet revolution, albeit one long in the making. I was lucky enough to head to New Zealand on a secret mission to test the new drivetrain well ahead of the launch, and will give you a rundown of the new offering below. But first, let's look at the components.

Gone are the cables. In their place: instantaneous wireless shifting, a stealthy, impact-resistant rear derailleur with auto-recovery technology, and controls that are customisable to your every whim.

At the heart of it all is Shimano's M9250 rear derailleur – a sleek, low-profile unit using their Shadow ES technology, that deflects off rock strikes with its wedge-like shape, then resets itself automatically after impact. Tucked inside is a sealed battery designed to take a beating without flinching, while a new stabiliser and chain-tension system keep things quiet and secure, no matter how rowdy the trail gets.

The wireless Di2 system brings an entirely new user experience, with shifters that can be customised to the rider's preferences – down to how many gears shift per press, or which button controls your cycling computer or suspension mode. Riders can now shape the interface to match their instincts – not the other way around.

Photos: Cam Mackenzie

And it's not just shifting that's evolved. Shimano's engineers, working with their elite Skunk Team testers, have completely rethought braking ergonomics. The new Ergo Flow levers feature an instinctive, natural feel, with closer pivots and upswept blades that better align with the rider's finger path. Add in a new, low-viscosity fluid and redesigned piston systems, and you get powerful, consistent braking whether you're grinding up alpine passes or bombing loose descents. Shimano claims these are the most stable, reliable brakes they've ever made – and they perform exceptionally no matter the weather.

Cranksets, wheels, and hubs have all received similarly thoughtful attention. From trail-ready cranks to ultralight carbon wheelsets with titanium spokes and near-instant 3.5-degree engagement hubs, every component in the new XTR family is dialled for performance under pressure.

Shimano has also carved out room for E-MTB-specific variants, including a wired version of the rear derailleur with Free Shift and Auto Shift, bringing intelligent shifting to the world of assisted mountain bikes.

A CLOSER LOOK AT SHIMANO'S 9200-SERIES WIRELESS XTR

The new XTR rear derailleur features a low-profile Shimano Shadow ES design to avoid snags, with automatic impact recovery to maintain performance after hits. Its strong, debris-resistant build includes a wide linkage and solid pulleys for durability. A dual-spring

system boosts chain tension for better retention, while a sealed, easily removable battery stays secure in rough terrain.

The RD-M9250 rear derailleur features Shimano Shadow ES technology for precise wireless shifting with a rugged skid-plate design and solid pulley construction. It includes a removable, rechargeable onboard battery and comes in two versions: a long cage (SGS) for 10-51T cassettes and a mid cage (GS) for 9-45T. For the e-MTB crowd, Shimano has released the RD-M9260, offering a wired setup powered by the e-bike's battery, featuring their Auto Shift and Free Shift technologies for seamless gear changes. It's available as a long cage SGS model in both 12-speed and 11-speed versions.

The CS-M9200-12 cassette features 12-speed Hyperglide+ technology for smoother, more durable shifting under load, with Micro Spline compatibility and options in 9-45T and 10-51T ranges – optimised for lightweight performance and durability.

Complementing this, the FC-M9220 trail and enduro crankset features Shimano's proven Hollowtech II construction for an ideal balance of stiffness, weight, and impact resistance. It includes an enduro-specific spindle for efficient power transfer and comes with a standard 176mm Q-factor, available in 160, 165, 170, and 175mm length options.

The FC-M9200 crankset is purpose-built for cross-country racing, their lightweight design sporting Hollowtech II technology. They feature a narrower (168mm) Q-factor and are available in 165, 170, and 175mm lengths.

The SW-M9250IR Di2 shifter switch uses Shimano Rapid ES technology to deliver precise wireless shifting with a tactile, responsive feel. It offers multiple shift modes including hold-down multi-shift, click-through double shift, and locked-out single shift – along with a four-way adjustable paddle. A programmable third button adds customisation options, allowing control of features like Free Shift and Auto Shift. It's available in both I-Spec EV and clamp band mounting options.

Price for the full drivetrain? A unexpectedly spendy $4365 for full drivetrain and brakes, though an upgrade kit featuring derailleur, shifter and accessories is available for $1684.

SHIMANO'S NEW XTR M9200 BRAKING SYSTEM

Shimano's new XTR M9200 braking systems deliver a complete overhaul across trail, enduro, and cross-country disciplines. The BL-M9220 enduro and trail brake lever features Ergo Flow technology and a redesigned upswept lever blade with a closer pivot point for a more natural braking feel. The new system uses low-viscosity fluid for consistent performance across temperature changes and includes a new reach-adjust dial and durable alloy blade, with I-Spec EV compatibility. Paired with the BR-M9220 caliper, it offers a dual-diameter 4-piston design, anti-rattle finned pads, and a rigid one-piece body for optimal control and power.

For cross-country, the lightweight BL-M9200 brake lever uses a carbon blade and magnesium cylinder, with low-viscosity fluid and I-Spec EV compatibility. The matching BR-M9200 2-piston caliper features heat-resistant resin pistons, a post-mount design, and seals engineered for consistent rebound and reliable braking across conditions.

WHEELS AND HUBS

Shimano's new XTR M9200 wheels and hubs combine lightweight performance with durability. The WH-M9220 Trail and Enduro wheelset features 29" carbon tubeless hookless rims, 30mm internal width, stainless steel spokes, and a robust 28-hole build. For cross-country, the WH-M9200 wheels offer a lighter setup with 29" hooked rims, titanium spokes, and a 24-hole design. Both use Micro Spline and Centrelock technology, and a quick 3.5-degree engagement. The updated hubs

offer smoother rolling, better sealing, and lower drag, with the freehub featuring a fast, efficient engagement.

ON THE TRAIL

I was fortunate enough to travel to the picturesque location of Wanaka for a solid few days piloting fresh steeds adorned with the latest iteration of Shimano's wireless XTR components. We were in the thick of Wanaka's best trails in the South Island of New Zealand. The stunning backdrops made my neck sore from whipping around to scope the landscape, riding both Bike Glendhu and Cardrona bike parks. To keep things under wraps, we had the bike parks to ourselves with private shuttles and a guide to make sure we could pump out as many laps as we could hold on for.

The weather gods showed mercy and provided light rain through the evenings for the most incredible levels of grip one could hope for – the unicorn of testing conditions. The combination of huge vert, park slaps, and janky terrain meant we had everything we needed to put the all-new Shimano wireless XTR M9200 Di2 groupset, brakeset, and wheelset through their paces.

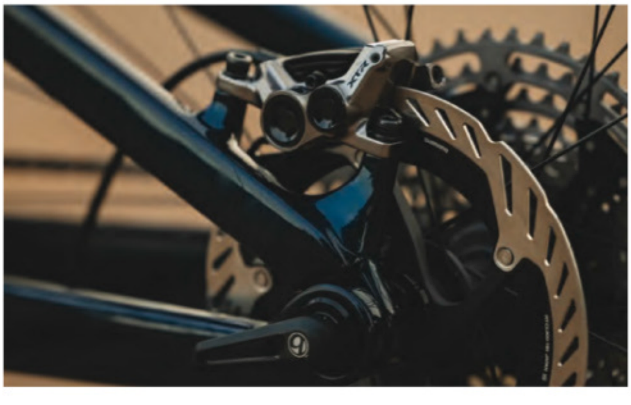
Nearly six years have passed since Shimano's first 12-speed M9100 XTR groupset hit the market, and they have worked tirelessly to make the latest-generation M9200 a polished offering. So many little details have been addressed using feedback from athletes, mechanics, and consumers. Shimano has listened, and it's refreshing to see such a well-thought-out product that has been tested thoroughly.

Dialling in our rides inside Glendhu Station, the first things I notice are the highly rider-adjustable ergonomics of the wireless shifter controls and brake levers.

Both shifter paddles can be moved further inboard or outboard and rotated using the same adjustable bolt, making it simple to set up in the best position for the thumb. There are two clicks: the first is crisp but not too sensitive, and the second much firmer, meaning unwanted double shifts are unlikely. As a safeguard, a mechanical limiter can be selected to single-shift only.

The shifting itself? It's fast... like really fast.

The brake levers' ergonomics are completely redesigned to work with the index finger's natural motion. The lever blade pivot is much closer to the bar, and there is now a 5-degree upsweep which feels very comfortable, surprisingly natural, and like nothing I've felt in a lever before. The lever feel is snappy, quick to



Photos: Cam Mackenzie

return, and has that firm and responsive feel I'm well acquainted with on Shimano products.

The all-new low-viscosity brake fluid is easily distinguishable with its orange colour and allows fluid to move to the caliper and back more freely, meaning brake action is stable across a far broader temperature range: consistency is key.

The derailleur is robust and tucked well out of the way thanks to Shimano Shadow ES technology and a low-profile wedge design that discards the previous generation's adjustable clutch. While that clutch was serviceable, I found it required more maintenance than I would have liked. The derailleur's silent presence on the trail can be attributed to a dual spring that keeps the cage taut – we can confirm it's a dream on rough and chattery terrain.

To assist with longevity, there are little to no sharp snagging edges on the derailleur, and it seems expressly designed for riders who shred hard, ride jank, and might accidentally come to blows with a rogue rock or two. The derailleur doesn't mount directly to the axle – instead mounting onto any current hanger or UDH – allowing the derailleur and frame to remain safe in the event of a major impact, with the hanger being the break point (a much cheaper replacement than a whole derailleur).

The auto-impact recovery feature is simple: when hit, the derailleur rotates backwards to absorb the impact, then returns to its original position thanks to a heavy spring, meaning you can keep riding without interruption. Given its low-profile silhouette, we only clipped it once in a janky chute – but its quick return gave us no indication of contact until we saw scuffs on the derailleur. We were very impressed.

Shimano is offering both 10–51 SGS derailleurs and an even more compact 9–45 GS mid-cage derailleur, which would be ideal for racing scenarios where minimising weight and potential damage is key. In addition to the wireless battery-powered rear derailleurs, there's an e-bike-specific RD-M9260, which can be powered directly by both Shimano and Bosch motors.

My S-Works Stumpjumper 15 test rig is a bike I was well acquainted with and was also tricked out with the all-new XTR M9200 wheels. While the hype of the trip was all about the M9200 groupset and brakes, I felt the wheelset is another huge step for Shimano. The wheelset features a low-profile, vertically compliant rim with a 30mm internal width, laced to sealed bearing hubs with minimal drag, easily removable endcaps, and a 3.5-degree engagement. They felt snappy, light, and provided hassle-free riding on a mix of sharp rocky trails and epic days in the bike park. I'm building my long-term tester Forbidden Druid up with an M9200 groupset and wheelset to continue testing this well-thought-out premium offering from Shimano.

One of my favourite features of the new XTR Di2 groupset is that existing Shimano 12-speed customers can simply upgrade the wireless derailleur and shifter – the new Di2 ecosystem works with all existing 12-speed Shimano components; a real point of difference. We look forward to seeing this tech trickle down the ranks.

Overall, I was mighty impressed with the new XTR. Shimano have done their research on this release – and while they admit to being late to the wireless party, the new offering is more than worth the wait.

For more information and pricing head to your local Shimano dealer.

Ryan Walsch

▲ Shimano's new XTR Di2 shifter comes in regular clamp (L) and I-Spec options (R).

◄ This one looks fresh! The new XTR Di2 shifter offers multiple shift modes, a four-way adjustable paddle and a programmable third button adds customisation options.

◄ A new, solid construction for the RD-M9250 derailleur, incorporating a skid plate, auto reset and available in mid- and long-cage designs.

The RD-M9260 is a new ► rear derailleur for eMTB that can be wired into your e-bikes power supply. It features AUTO and FREE shift technology and comes in 11 and 12sp options.

▲ The new XTR 9200 cranksets are available in two offerings, a trail/enduro crank available in 160, 165, 170, 175mm lengths and a race-focussed XC crank available in 165, 170, 175mm with a narrower Q-factor.

▲ Shimano's new XTR trail brakes include new low-viscosity oil, closer pivot point and a reach-adjust dial on the lever body, with a dedicated trail/enduro 4-piston caliper.

▲ Shimano's new XC race-ready XTR brakes feature a carbon blade, new low-viscosity oil and are paired up with a lightweight, post mount 2-piston caliper.

Tested

- ✚ *SRAM's best mechanical shifting ever*
- ✚ *Tactile lever feel*
- ✚ *Improved ergonomics*
- ✚ *Fuss-free UDH fitting*
- ⚊ *Still not the slickest mechanical shift available*

RRP: FROM $1149
From: SRAM.com

SRAM
EAGLE 90 MECHANICAL TRANSMISSION

In March, SRAM declared that the gear cable is not dead, with the introduction of the Eagle 90 and Eagle 70 Mechanical Transmission groupsets; cable-actuated drivetrains that use the T-Type platform – ditching electronics, mostly. Both groups use SRAM's Full Mount interface (UDH), offering the same hangerless durability and frame interface as their premium AXS electronic systems – but without the need for batteries or wireless connections.

While we have seen bikes released that will only work with wireless drivetrains, there are countless reasons why some riders prefer a mechanical solution – be it bikepacking, upkeep cost, tactile shift feel, or something else entirely. What is really cool is that this is SRAM's most rebuildable mechanical derailleur to date, with a wide range of spare parts. I was sent an Eagle 90 Transmission group and Motive Ultimate Expert brake kit to review, right on release.

FIRST LOOK

The centrepiece of the Eagle 90 Transmission is its mechanical derailleur (391g), sharing the same Full Mount design as its electronic siblings. SRAM claims it's the strongest mechanical derailleur they've ever built. It lacks the Overload Clutch mechanism found in AXS versions, but it's built to withstand impacts and can be fully rebuilt with replaceable parallelogram links, skid plates, and a threaded cage assembly. And yes, there are videos of people standing on it.

The system uses a completely new T-Type cable actuation ratio, meaning it's not compatible with older Eagle 12-speed shifters – just like with any T-Type group, this isn't a groupset upgrade of a couple of parts. The derailleur is paired with a revised Eagle 90 shifter (129g, with cable), featuring a redesigned ergonomic paddle shape and a double-click downshift, making it ideal for those who felt AXS wasn't rapid enough when wanting to dump a bunch of gears.

The drivetrain uses existing SRAM Transmission chains and cassettes, and I had an XS-1275 cassette on review. The Eagle 90 crankset is built for durability, not low weight (810g). It comes with a stamped steel T-Type chainring and bashguard, ideal for trail and backcountry use. The crank uses a DUB Wide spindle for a 55mm chainline and is available in five arm lengths from 155mm all the way up to 175mm. I tested a 165mm pair paired with a 32t ring.

SETUP

Installation is pretty straightforward and akin to any T-Type drivetrain, but very different from most mechanical drivetrains. With no B-tension or limit screws to worry about, the process is more 'bolt-on and ride' than most mechanical systems. Chain length is still critical, however, and SRAM's setup guides online make it all quite simple. You look up your bike to get the setup position (A or B) on the mech, then determine chain length based on your specific frame model and chainring size.

Setting the shifter up at the same time as the Motive brakes, I also had a SRAM mechanical dropper lever provided (44g). What's cool is how the ergonomics perfectly match the shifter, including its adjustable positions. With outer routing to match the shifter, the pairing makes for a very neat cockpit.

ON THE TRAIL

I had the Eagle 90 Transmission drivetrain fitted onto a new frame – a Salsa Timberjack built up as a trail hardtail and bikepacking bike. Before riding it, I expected much of the shift performance that Transmission delivered, but with a more tactile feel. Part of what makes the smooth shifting with SRAM's T-Type groups so good is the chain and cassette, and how the chain moves across the cassette, especially under load. SRAM calls it cassette mapping, Shimano calls their version Hyperglide+. For us riders, it just means better shifting under load for up and down shifts. Whether that happens mechanically or electronically makes little difference, save for actuation load at the lever, with the former being at the whims of cable and outer degradation. So with the expectation of super slick shifting but with more tactile feedback, I hit the trails.

My first impressions were positive. Shifting is quick, quiet, and dependable – even under load. SRAM's new actuation ratio and paddle design make for smooth transitions, and the two-gear limit on downshifts feels smart, reducing the risk of chain skips under pressure. As you would expect, the system is quiet on descents with a solid clutch.

Where the group really shines is shifting on steep terrain under load. I've nursed some very flogged out drivetrains through long, long lives over the years, and I'm very much used to feeling a shift through my thumb and the pedals. But as you'd expect from a T-Type groupset, when you add load it just seems to get better. And that is perfect, as high-load shifting situations are typically right when some other things need attention – like traction, line selection, or holding the damn wheel in front of you.

In terms of tactile feedback, there is barely any free movement of the shift lever before actuation, which is ideal for quick shifts to get set in the right gear. While it shifts great under load, that is still something I avoid as a force of habit.

Chain retention and chain slap used to be something we had to worry about a few years ago – but even riding a hardtail with too much pressure in the tyres wasn't enough to dislodge anything. We truly are in the golden age of external, derailleur-actuated drivetrains.

OUR TAKE

If you're a mechanical drivetrain lover, you either hate electronic groupsets or just cannot justify the cost of them. Maybe both. My time on AXS Transmission groupsets in 2023 and 2024 easily proved just how good the shifting was from SRAM's Eagle offerings. While GX Transmission reduced the cost, Eagle 90 and Eagle 70 have arrived to essentially replace the 12-speed Eagle GX and Eagle SX respectively. From a servicing standpoint alone, Eagle 90 is ahead. Throw in the secure, crisp shifts with Transmission shift mapping, plus what I feel is better ergonomics along with less fuss thanks to the UDH fitment and you have what could be a leader for mid-range mechanical groupsets.

Eagle 90 should find favour with trail riders, travellers, bikepackers and performance-minded riders alike.

Mike Blewitt

Photos: Mike Blewitt

ADVANCED SUSPENSION
MOTIVE

MOTIVE
SRAM

SRAM
MOTIVE EXPERT ULTIMATE BRAKE KIT

tested

+ *Everything you need in one box, almost*

+ *Lots of power for low weight*

+ *Sleek design*

+ *Mineral oil for easier maintenance*

− *Some may miss bite point adjustment*

RRP: $1030
From: SRAM.com

SRAM has been overhauling their brakes over the last two years. First, the DB8 with a switch to mineral oil among other changes, then last year's release of the Maven monster stoppers. And they're back at it with the brand-new Motive – a lightweight four-piston brake system targeting downcountry and trail riders – and also finding a home on the rigs of World Cup cross country racers, too.

SRAM's simplified lineup now consists of three main families: Maven, Motive, and DB. The Code and Level are both ready for retirement, and the Motive aims to be the new go-to for riders chasing lightweight performance without skimping on stopping power. We got our hands on the top-tier Motive Ultimate Stealth Expert Kit for review.

FIRST LOOK

Unboxing the Expert Kit is like opening a gift box chest for brake nerds – just like the Maven Expert kit I tested last year. The box includes a full factory bleed kit, four CL-X rotors (2x 180mm and 2x 160mm), two complete Motive Ultimate brakes, two sets of pads (one sintered, one organic), and two 160–180mm brake mount adaptors – so you can play around with compounds and rotor sizes and tailor your setup to how and where you ride.

The Motive takes a few design cues from the Maven, but obviously in a slimmed-down package. The caliper and master cylinder are shrunk to keep the system lean, and the green splatter paint finish on our Ultimate test set looks the goods. SRAM's tidy Stealth routing keeps cockpit clutter to a minimum. The DirectLink system keeps things simple with a sharp lever feel. The system weight was 520g for both sets, without rotors or adaptors.

SETUP

Installation is straightforward, with a couple of quirks. Matchmaker compatibility makes it easy to bolt on other SRAM parts, and I tested the Motives in conjunction with the Eagle 90 Transmission on my Salsa Timberjack with a 180/160mm rotor combination, and using the organic pads as fitted.

At the caliper end, the rotatable banjo fitting allowed clean hose routing, although the lowest-level Bronze brake set doesn't allow this. The rotatable banjo really helps for good routing across a wide range of frames.

Bleeding the brakes is a simple process, especially thanks to the factory bleed kit included.
SRAM's move to mineral oil means longer service intervals, fewer paintwork worries, and a reduced risk of skin and environmental damage compared to DOT fluid. That's a win for me. I've even used some old mineral oil to re-oil my workbench!

Photos: Mike Blewitt

ON THE TRAIL

The Motive delivers a lever feel that's unmistakably SRAM, from the taller lever blade through to lever feel at the bite point. SRAM's DirectLink design means there's a longer free stroke with a decisive bite point, with no bite point adjustment. Some may not love this, but I think it is far from an on/off feel. It is worth remembering that the Motive is a lighter brake, and I found the lever feel was consistent throughout the test period. I didn't think about it twice.

Modulation is great, but within a fine range of finger motion. I lack long, alpine descents to put the brakes under a lot of pressure, but with slippery roots through to dusty trails in the test period, all on half-worn tyres, brake feel was important and the Motives remained predictable and precise.

I really like that the brake kit comes with both organic and sintered pads, plus the option to bump up to 180mm front and rear. You could even jump to SRAM's HS2 rotors if you needed some more power from the brakes.

Under heavier braking, I really liked how stiff the levers felt. While they are not the lightest brakes out there, they feel a lot more solid than many light brakes. That is really reassuring when you're hauling on the anchors. I think it is easy to be underdone with braking performance. What SRAM did with the Mavens revolutionised what many thought was possible with braking power. And I'd say the impact of the Motives will reset what many expect for the power and control available from a very light 4-piston brake.

OUR TAKE

Given the target audience of cross country, downcountry, and light trail, I think SRAM is right on the money with the Motive brakes. They have the updated design features and aesthetics of the Maven in a product that can cover the Code and Level, while playing catch-up with what a brake needs to deliver for cross-country and downcountry. The balance of power, weight, and ease of maintenance makes the Motive Ultimate a smart new entry to the world of mountain bike brakes.

The true success will be OEM spec by bike brands and, of course, making the build list for riders like you and me building up dream bikes or upgrading components. For a long time, my favourite brake was the XTR M985 trail brake – two pistons, a lot of lever adjustment, and progressive feel.

While I'm the same rider now as a decade ago, I'm probably more wary on the trail, and improvements in bikes and wheel systems allow greater speed – which demands better braking. The Motives are light enough to sling on an XC bike while having the power for a light trail bike – and I think these will be a very popular brake set for this broad and important market segment.

Mike Blewitt

5 DAY LOADING PACK
PURE
SPORTS NUTRITION
PERFORMANCE+
RACE READY NITRATES
500 mg NITRATES
NITRATE LOADING DRINK MIX
WITH ADAPTOGENIC BLACKCURRANT
Supplemented Food
39g

Tested

+ *Tasty, if you like beetroot*

+ *Increased performance despite poor lead in*

− *Expensive*

− *One pack lasts five days*

RRP: $54.99 (5 SACHETS)

puresportsnutrition.com

PURE
RACE READY NITRATES

Pure Sports Nutrition have released a new Performance+ range, including their foray into nitrate supplements with Race Ready Nitrates. Each sachet delivers 500mg of nitrates, along with anthocyanins and Vinitrox, to be mixed into water and consumed as part of a loading protocol before big events.

WHAT ARE NITRATES?

Once seen as a mythical sports supplement with more hype than evidence, nitrates are now well-supported by research. Found naturally in foods like beetroot, nitrates work by enhancing the availability of nitric oxide (NO) in the body – particularly important when oxygen is limited, like in muscles during intense exercise.

The nitrate–nitrite–NO pathway is key here. Ingesting dietary nitrate increases blood nitrate levels, which can boost NO bioavailability and potentially enhance performance – especially in high-intensity, oxygen-limited situations.

Nitrate supplementation is now classified as a Group A supplement by the Australian Institute of Sport, indicating strong evidence supporting its use in sport when implemented using evidence-based protocols. According to the AIS, “dietary nitrate supplementation can enhance muscle power, sprint, multiple-sprint, and high-intensity intermittent exercise performance.” Sounds like mountain biking to us.

WHAT’S IN THE MIX?

Pure delivers the nitrate dose via a blend of beetroot juice concentrate and an amaranthus extract called Oxystorm. They’ve also included:

- 500mg Vinitrox, a blend of polyphenols from apples and grapes, for general health support
- 150mg anthocyanins from blackcurrant powder, claimed to offer adaptogenic support to aid recovery

USING RACE READY NITRATES

Pure recommends a five-day loading phase before a key event to prime the body for performance – conveniently, each box contains five sachets. However, there’s evidence that both loading and single-dose approaches can be effective, so it’s worth experimenting with both to find what works best for you.

A small caveat: the research suggests that highly trained athletes (those with a VO2 max over 65 ml/kg/min) may see less dramatic improvements from nitrate supplementation. Fortunately for me, I’m still clawing my way out of several years of dad-bod, so I’m likely to be more responsive.

HOW DID IT GO?

Taste-wise, it definitely leans into beetroot territory. But thanks to the inclusion of blackcurrant powder and sugars (dextrin and cane sugar), the final flavour is far more palatable than raw beetroot juice – more unique than unpleasant.

I trialled the product over a couple of days, then headed out for a long aerobic time-trial. One caveat: I was just coming off a week-long bout of gastro, so my legs weren’t exactly primed. In fact, I’d accidentally dropped back to my teenage race weight (silver linings?), despite being in my forties.

Starting out on a 37 minute hill climb, I didn’t feel great. My legs were flat and my body felt under-fueled in the wake of the gastro. Still, I stuck to my regular race fueling strategy and pressed on.

The result? Just one minute off my best time. From 2016. I genuinely couldn’t believe it, given the lead-in conditions and sensations during the ride. I was expecting to be well off the pace. While this isn’t a controlled scientific test, the result was impressive enough to make me take notice – especially when everything else pointed toward a sub-par ride.

FINAL THOUGHTS

With strong scientific backing and real-world effectiveness (even under less-than-ideal conditions), Pure’s Race Ready Nitrates is definitely a product to consider before your next big event. I’m looking forward to retesting it with a more optimal setup – both as a one-off pre-race dose and using the full five-day loading protocol.

Considering how nitrates work to boost performance, it’s likely that any cross-country or gravity-focused mountain biker could benefit from their sprint and high-intensity performance effects.

If you’re aiming to ride hard and recover well, this is one supplement that’s worth adding to your prep routine.

Adrian Leftman

nsw
forests
MTB
Lives
Here.

NSW State Forests are a mountain biker's dream, offering kilometres of tracks and trails for every skill level.

There are 30+ State forest locations statewide offering dedicated MTB trails, managed by MTB Clubs under Forest Permits.

Check out our website for the full list of locations, or find out more via MTB Clubs in your area.

Grab your bike, hit the trails, and discover the beauty of NSW's forests on two wheels.

Share your experience:

Add #VisitNSWForests to your shots, or visit us @visitnswforests

forestrycorporation.com.au/MTB

Forestry Corporation

Start Ride
Routes
Workouts
wahoo

Here is the Roam 3, Roam V2, Bolt 3 and original Bolt V1.

Tested

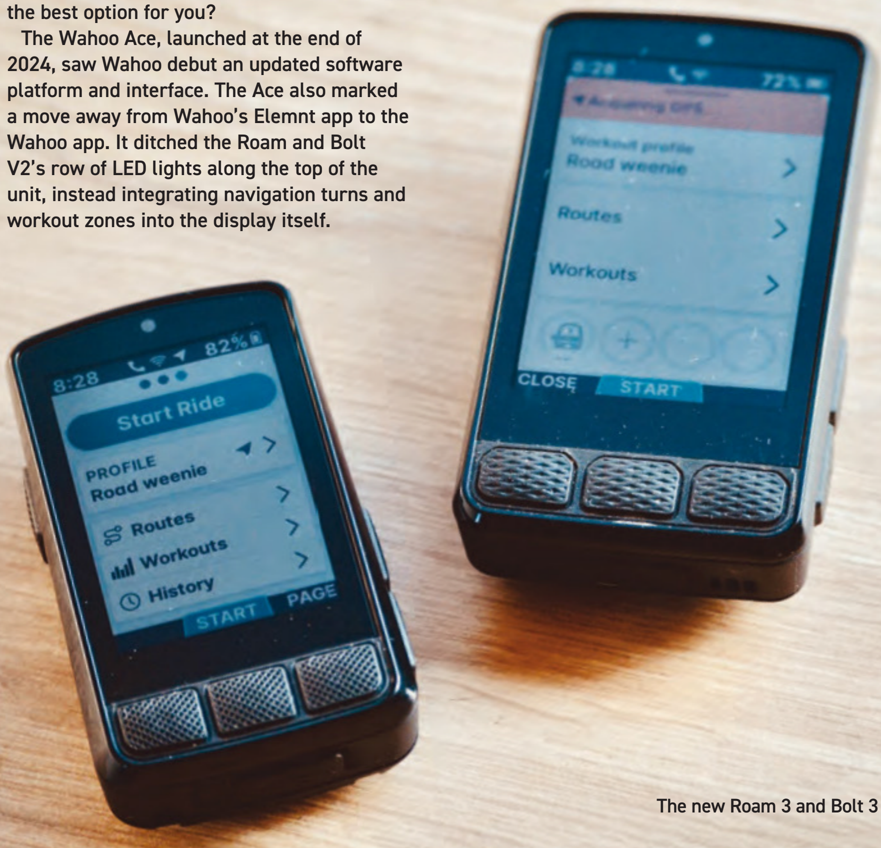
WAHOO
ACE, ROAM 3 AND **BOLT 3**

WHAT'S RIGHT FOR YOU?

Wahoo is no stranger to the cycling world, with its Elemnt Roam and Bolt computers being stalwarts in many cyclists' arsenals. With the recent release of the Wahoo Ace computer (reviewed in issue 212), Wahoo has now released updated versions of the Roam and Bolt. But with three computers in their quiver, what's the difference? And what is the best option for you?

The Wahoo Ace, launched at the end of 2024, saw Wahoo debut an updated software platform and interface. The Ace also marked a move away from Wahoo's Elemnt app to the Wahoo app. It ditched the Roam and Bolt V2's row of LED lights along the top of the unit, instead integrating navigation turns and workout zones into the display itself.

The Ace represents Wahoo's premium offering, with a luscious full-colour experience and voice navigation, plus its unique metric: the Wind Sensor. I've been able to test out the new Roam 3 and Bolt 3, and here are some key differences between the units.



The new Roam 3 and Bolt 3

wahoo
185
16²
Pause
Page

WAHOO **ACE**

RRP: $999.95
Weight: 208g (actual)

I reviewed the Wahoo Ace in issue 212 and was happy to see the brand integrate key features that brought Wahoo in line – feature-wise – with other heavyweights in the cycling computer market.

The Ace features the largest screen on the market – 36% larger than the Roam. With its launch, we also saw key features like the 'ready-to-ride' dashboard, a speaker with voice navigation, a screen colour upgrade, and a touchscreen interface.

The Ace also introduced a new key metric: a wind sensor. While this may not be top-of-mind for most mountain bikers, for someone who dabbles in gravel or road disciplines, it could be a desirable feature.

Its overall heft and size may be off-putting for the ultimate weight weenie, but for someone who wants their metrics clearly visible – or is navigating frequently – the Ace is a truly lush experience.

WHO IS IT FOR?

In my experience, the Ace is the perfect computer for a cycling aficionado who does it all and wants a premium product. Maybe you enjoy a bikepack, a trail ride, an Everest challenge, or a stage race – all without having to worry about charging your computer. With a claimed 30 hours of battery life (26 hours actual when tested), it's a great option for someone who thrives on long adventures, uses maps, and/or dislikes constantly charging devices.

WAHOO **ROAM 3**

RRP: $749.95
Weight: 109g (actual)

The Wahoo Roam 3 sits between the top-tier Ace and the minimalistic Bolt 3. As a former user of the Roam V2, I found the Roam 3 (not V3 – thank you very much!) brings a host of upgrades introduced with the Ace to a more compact package.

A key enhancement is the touchscreen interface, along with a leap from 64 colours to 16 million. It now includes a speaker, spoken turn-by-turn navigation, street names, and detailed map layers pulled directly from the Ace. One of my favourite Ace features – the bike bell – has also made its way into the Roam 3.

The Roam is a bit like an Ace-lite, though it lacks the Wind Sensor, and its claimed battery life is now 25 hours (up from 17 on the V2), still trailing the Ace. But at just 109g and with a 2.8" screen (up slightly from 2.7"), it's lighter and more compact.

It also includes the sensor pairing dashboard and Activity Profiles from the Ace – a really nice touch.

WHO IS IT FOR?

I once was a bare-bones computer lover – after all, who needs more than watts, heart rate, and ride time? But my experience with the Ace and now the Roam 3 has shifted my mindset. The Roam is the perfect 'baby bear's porridge' option for the cyclist who loves a weekend adventure with maps, but isn't keen on the extra 100g of the Ace when toeing the line at the occasional race. Many Ace features have trickled down, offering a beautiful mapping interface and speaker on a moderately sized, touchscreen display. If you do a bit of everything, the Roam is for you.

WAHOO **BOLT 3**

RRP: $529.95
Weight: 85g (actual)

The Wahoo Bolt is the workhorse of the range and is now the only computer without touchscreen capability. Swapping between the Ace, Roam 2 and Bolt, I quickly forgot how to use buttons – but the interface is intuitive and doesn't take long to relearn.

The display size has increased – marginally – from 2.2" to 2.3", and colours have jumped from 64 to 16 million. The Bolt 3 includes dual-band GPS for increased accuracy and improved connectivity with third-party apps. Battery life has also had a bump: from 15 hours on the V2 to a claimed 20 hours. As I've had pre-release access, I haven't yet put that claim fully to the test.

Again, the Bolt borrows from the Ace with the 'Ready to Ride' dashboard, simplifying sensor pairing and battery checks. Activity Profiles also carry over – a must-have for anyone riding multiple bikes or disciplines that need different data fields.

Map-wise, it's the same luxurious experience as the Ace – in a smaller and button-operated package. The navigation interface includes street names and map layers. However, unlike the Ace and Roam, the Bolt lacks a speaker. Navigation comes via screen prompts and a beep.

I've always loved a minimalistic computer, and the Bolt 3 ticks all the right boxes. For riders not using navigation extensively and wanting a lightweight unit with plenty of functionality, the Bolt 3 might be your new best ride buddy.

WHO IS IT FOR?

You're a speed demon or a minimalist – and that extra 24g of the Roam isn't even a question. The Bolt 3 does nearly everything: multiple profiles, navigation, and metrics galore. But the screen is smaller, there's no touchscreen, and no speaker navigation. Still, if you want to get your ride done, upload, and analyse later – this is your efficient match.

FEATURE	WAHOO **ACE**	WAHOO **ROAM 3**	WAHOO **BOLT 3**
RRP	$999.95	$749.95	$529.95
Weight (actual)	208g	109g	85g
Screen Size	3.5" (largest on market)	2.8"	2.3"
Touchscreen	Yes	Yes	No
Colour Display	16 million colours	16 million colours	16 million colours
Battery Life (claimed)	30 hrs (tested: 26 hrs)	25 hrs	20 hrs
Speaker with Voice Nav	Yes	Yes	No (beep only)
Wind Sensor	Yes	No	No
Ready to Ride Dashboard	Yes	Yes	Yes
Activity Profiles	Yes	Yes	Yes
Sensor Pairing Dashboard	Yes	Yes	Yes
Navigation Capabilities	Full w/ voice & maps	Full w/ voice & maps	Full, no voice
Dual-Band GPS	Yes	Yes	Yes

For more information head to **fesports.com.au**

Tested

+ *Clever, integrated designs*

+ *Wide range of tool sizes to fix most on bike issues*

− *Potential to lose the bits on the trail*

− *Not for time-crunched applications*

GRANITE SCOPE MOUNT
RRP $14.95

GRANITE SWAT MOUNT
RRP $34.95

GRANITE STASH TUBELESS TYRE PLUG KIT
RRP $34.95

GRANITE STASH CHAIN TOOL
RRP $36.95

GRANITE STASH RT
RRP $109

GRANITE **STASH SERIES**

Granite were generous enough to send me a selection of their Stash range of on-board tool storage solutions to put through their paces. Granite's Stash line of products is a well-thought-out, price-conscious range aimed at getting the job done without breaking the bank. On test were the Granite Stash RT, Scope Mount, Chain Tool, and Tire Plug Kit. Throughout the testing period, I put the tools and the plug kit to use on the trail and tested the chain tool in the workshop.

GRANITE STASH RT

The ¼" drive ratchet tool is the heart of the Granite Stash RT. Despite its diminutive size, it's made from proper S2 alloy-grade tool steel. The tool holder stores the mini ratchet and nine driver bits inside your bike's fork steerer tube for quick access, and is compatible with almost all forks, including inner tapered steerer tubes (except Fox 38 Performance). The kit contains 2mm to 8mm Allen bits, a T25 torx, and an extended Phillips head bit for leverage. The tool holder is spring-loaded and pops up when the top cap is rotated out of the way.

The maximum torque for the mini ratchet is 20Nm, which is more than enough for tightening loose bolts on the trail, but removing stuck pedals or cranks is well beyond its design and limit of leverage.

My only reservation with the driver-based tools is the peril of dropping the bits while using them on the trail. Of course, I did exactly that and spent 5 minutes looking through the grass to find a dropped bit. After this experience, I was mindful to remove the ratchet from its housing, select the driver bit I wanted, and store the remainder back in the steerer tube. If you are unlucky and lose a few bits, Granite also offers a replacement Ratchet Tool kit to get you back on the trail.

GRANITE STASH TUBELESS TYRE PLUG KIT AND GRANITE STASH CHAIN TOOL

The tyre plug and chain tool come with two sizes of rubber grommets that secure them in the handlebar or crank axle, and I tested one in each. Tightening the small Allen bolt in the end of the tool squeezes the grommet to keep it in place. Initially, I ran the tool installed loosely so I could pull them out by hand, but with the ease of access to the ratchet in the steerer tube, I tightened them up so I didn't have to worry about them coming out on their own.

The tyre plug kit uses the typical gummy worm-type plugs and comes with small and large diameter plugs. I pre-mounted the larger of the two sizes in the tool and stored it in my handlebar end. I've never been happier to be rolling on a flat; I got a small cut in my tyre during the test period and used the knurled reaming tool to enlarge the hole and then jam in the plug. Many rides and kilometres later, I am pleased to see it continuing to do the job without issue. Granite also offers replacement plug refill packs in both 1.5 and 3.5mm sizes.

I trialled mounting the chain tool in the hollow crank axle. After a few deep creek crossings or after washing, the grommet managed to prevent water from draining out the end of the axle. The o-ring seals on the tool remained watertight and were not a source of problems, but my preference is to mount it in the handlebars. Quick links have reduced the number of people who carry a chain tool, but only a chain tool can remove damaged links. I did not have any chain issues on the trail, so I put it through a bench test, breaking and joining old chains. Apart from getting greasy fingers from the chain, it was a pleasure to use.

GRANITE SCOPE MOUNT

The Scope Mount for my Garmin (also available for Wahoo and Bryton) is a great solution if you have limited or no space on your handlebar, and is also available as an adaptor for Specialized's SWAT steerer storage system.

Using the Scope Mount, there was not enough clearance to remove the ratchet tool from the steerer with my Garmin mounted, meaning I needed to grab my computer off the mount before accessing the tools. The 3mm Allen bolt retaining the cap would undo when rotating the top cap and is my one minor grumble about the Stash series: a larger bolt and captured nut that swings further out, would be a nice future refinement.

Overall, the Granite Stash range of the tools meets expectations for a tool on the go, and the clever, stealthy storage design elevates them above standard trail tools for a rider who prefers to 'set and forget'. They are still on my personal bike, and I do not see a reason I would take them off – except to give them back!

Oppy Maierhofer

Tested

- + Soft, comfortable compound
- + Ergonomic profile that fits the hand well
- + Various colour and diameter options
- − Soft and varied rubber may lack precision for some

Sizes: Regular Ø31mm (tested), Thin Ø29mm
Colours: Black, Lava, Peanut (tested), Granite
RRP: $59
mtb.leatt.com.au

LEATT
REAFLEX 6.0 GRIPS

Many riders overlook the importance of choosing the right grips for their bike. As one of only two contact points with the bike – and the more sensitive one in terms of fit, comfort, and fatigue – grips play a crucial role in overall ride quality. Factors like ergonomic shape, lock ring placement, rubber density, length, and tread pattern all contribute to performance and comfort. Leatt's new ReaFlex grip range introduces a unique design aimed at reducing arm pump and hand fatigue.

OUT OF THE BOX

As we've come to expect from Leatt products, the design of the ReaFlex 6.0 has unique ergonomic features designed to better allow the product to interact with the rider. The regular sized grip I have on test has a varied diameter, starting at 31mm from the lock ring and growing to 33mm at the outer edge. A raised pad through the mid section of the grip is designed to fill the concave area your palm creates when in a grip holding position. To increase comfort and the grip's ability to micro-adjust within your grasp, there is also a half-waffle to the underside, and circumferential ribs internally where your pointer finger and thumb rest. In all, this grip has a lot going on to optimise comfort!

The rubber durometer is definitely on the softer side, and is noticeably softer than the ODI grips I typically run. Lying beneath the outer layers of this grip is a layer of Leatt's own RealFlex gel. Similar to D30, this non-newtonian gel is designed to absorb vibrations and impacts as it changes its hardness under load. The grip itself is fixed to your bar with a single internal lock ring which uses a 3mm allen bolt.

REAFLEX
REAFLEX
REAFLEX
REAFLEX
the hub

ON THE TRAIL

The intricate pattern and extensive features of these grips come together to deliver one standout benefit – comfort. Designed to fit naturally in your hands, the ReaFlex 6.0 grips use soft rubber to enhance their ergonomic feel. Notably, the varied cross-section increases the external diameter, reducing pressure on the outer hand during long rides. A raised palm pad further improves comfort, a feature I've come to consider essential in any grip I use.I found that these grips effectively dampen micro-vibrations and chatter that can contribute to discomfort. Riders who love the ESI Chunky slip-on grips but prefer a lock-on option should definitely give the ReaFlex 6.0 a try. Though the soft rubber and ReaFlex core slightly reduce precision and ground feel, the added comfort is well worth the trade-off.

OUR TAKE

Aside from a laundry list of features, the new 6.0 ReaFlex grips from Leatt deliver a comfortable fit and soft ride character. For those riders who prefer an ergonomically designed grip these should be on your radar.

Hayden Wright

chillfactor
CELEBRATING SKI CULTURE
Hakuba
The Powder Highway
Road to the Gap
Higher Ground

SNOW ACTION
SINCE '97
TRAVEL GUIDE
2025
A-Z
FOR FAMILIES OF ALL AGES & STAGES
WIN!
AUSTRALIA JAPAN
CANADA EUROPE
GULMARG NZ USA
SOUTH AMERICA
snow travel expo

ADVENTURE ENTERTAINMENT

AUSTRALIAN MOUNTAIN BIKE SUBSCRIBER EXCLUSIVE

CHILLFACTOR 2025
SNOW ACTION 2025
BUNDLE

Get stoked for winter with the 2025 Chillfactor + Snow Action Bundle — your ultimate guide to the snow season. From deep powder stories to destination guides, it's all here!

TOTAL VALUE:
$34.95

ONLY
$20

GET NOW!

SCAN THE QR CODE

STOKEDNZ
TOWELIES

THE BEST RIDING ACCESSORY YOU DIDN'T KNOW YOU NEEDED!

Stoked NZ is a brand that was born out of turmoil, as founder Debs overcame a prolonged return from injury that made her rethink life and purpose. Debs had a seemingly innocuous accident while competing at a 'backyard enduro' just outside her hometown of Rotorua. Laughing off the crash from a drop, it wasn't until a few days later that Debs started to notice she still wasn't feeling herself. At the time, she headed into her job (as an analyst for Cycling NZ) and was assessed by the organisation's athlete doctor, who sent her for an MRI, which showed Debs had suffered a traumatic brain injury.

A long recovery ensued, taking 18 months to return to part-time hours at work, while things like crossing the road and completing children's LEGO kits remained a challenge. Debs explains the frustration of constantly trying to change things within the rigid system of Cycling NZ, and instead thought, "Flock it, I've got nothing to lose, I've hit rock bottom – I'm going to make some towel ponchos," and she was able to lean into building her own empire. While injury recovery was a dark time for her, it was out of this darkness that Stoked NZ began.

New Zealanders are made tough – anyone who has ridden across the ditch can attest to that. Outdoor activities are in the blood of all Kiwis, and Debs and her partner and co-founder, Gary, are no exception. Riding bikes rain, hail or shine, they had been using towel ponchos to get dressed and dry off after muddy days on the trails, but they weren't quite right. Scratchy microfibre and strangely sized products didn't fit the bill.

Wanting to continue her recovery while building towards something bigger, Debs launched StokedNZ and their range of premium towel poncho products. Designed in Turkey, Towelies are ethically made, without large-scale factories or dubious labour practices, and also feature sustainable packaging.

We received two Towelies for our test – Zoe and Ethan. Towelies are available in multiple designs that change seasonally, and each one is named after a cyclist or inspiring person. Each has a 'kangaroo' pocket on the front for hands and essentials, and side slits to facilitate ease of movement.

It's immediately apparent that Towelies differ from garden-variety beach towels. The Turkish cotton is deceiving; surely such a fine material would struggle to absorb moisture? But I can confirm: they do punch above their weight in absorbency and drying speed.

Our lightweight slimfit Ethan Towelie packs up to a small size. Is it small enough that I would take it on a long-distance bikepack? Perhaps not, as a tiny microfibre towel could get you dry for a much smaller volume cost, but the Towelie option would certainly be a more luxurious option for those less worried about pack volume.

Compared to the Ethan, the Zoe Towelie is thicker, and more similar to a regular towel in thickness. The Zoe is a size large, which is 116 cm long and 83 cm wide, while the Ethan is medium at 104 cm in length and 83 cm in width. Throwing this on, the Zoe is a warmer and longer option with a thicker material. This is a great option for rides from the car, a portable change room when out and about, or even side-quests like river dips and post-ride swims.

The medium and large sizes feature the same width – you look like a trail/beach druid hybrid in both – the length is the key differentiator between the two sizes. For me, the medium Towelie was the best fit; the large was a little long and made changing slightly more cumbersome. For someone taller, it would likely be the best option.

The lightweight Towelie was the best option for warm weather and for when you need a towel to pack down small. For that all-day beaching vibe, I could definitely see myself using the original Towelie for a post-ride swim followed by a few lazy coffees in a nearby café.

What I really loved about the Towelie is the quality of construction, fabric, and its trail-adjacent versatility. A Towelie could be the ultimate gift (after all, we buy the parts and accessories ourselves). At $101 AUD per Towelie, it's a premium product, but StokedNZ does offer a bulk discount for purchases of four or more Towelies.

So if you're looking for a present for the athlete or mountain biker who has everything in your life, perhaps the Towelie is the gift you're looking for. Alternatively, if you're looking for a solution to the post-ride change-room situation, a fresh and versatile towel, and are sick of mooning the public while scurrying to change between car doors, the Towelie is for you.

Anna Beck

Tested

⊕ *Solution for change room issues*

⊕ *Warm and absorbent*

⊕ *Look like a cool trail druid*

⊖ *Premium product*

⊖ *May make you look too cool*

RRP
$100 AUD
stokednz.co.nz

e*thirteen
4NM
4NM
R

tested

RIMPACT CHAIN DAMPER

- Increases ride quality
- Easy installation
- Durable
- Expensive
- A little weighty

RRP $549
rimpactmtb.com

Rimpact is not a new brand to us here at AMB, having tested their rim protection inserts back in 2021. However, the Chain Damper that we have on test here is a very different product that, in a roundabout kind of way, tries to solve a similar problem.

The team at Rimpact has a healthy obsession with making bikes as smooth and quiet as possible. Their range of products aim to tackle unwanted vibrations; either via your wheels with their inserts, via your suspension with their mass dampers, or via your chain with the Chain Damper.

WHAT IS THE RIMPACT CHAIN DAMPER?

The Chain Damper reduces chain feedback caused by chain movement while riding over harsh terrain, as well as reducing pedal kickback caused by the natural pull of the chain on the chainring as the rear suspension sinks into its travel. In simpler terms, it quietens your bike while simultaneously allowing the rear suspension to travel more freely.

Chain Damper
Rim

Upon receiving the Rimpact Chain Damper, I was pleased to see how minimal the packaging was – to the point of including no manuals or installation info. This could be off-putting if it weren't for the great online support Rimpact provides on their website, including installation guides, maintenance tips, and FAQs. You really can't go wrong.

The unit is well-crafted; the proprietary chainring looks premium in its golden finish, and Rimpact claims it's extremely durable. At $170 for a replacement ring, you'll hope the claims of durability hold true. Being a UK-based brand, durability and resistance to water ingress were high on their priority list, and so far, I'm pleased to report there have been no creaks or any need to open the unit for maintenance.

Installation was smooth – as straightforward as any regular chainring swap. Bonus points go to Rimpact for offering fitment options beyond SRAM and Shimano, such as Hope and Race Face – a very welcome touch. Fitment on my Merida OneSixty was tight but precise, with no need for the provided spacers. The unit weighed in at 239g (actual).

The first time you ride with the Chain Damper, you'll notice the 'free travel' of your cranks as you move through the 8.6 degrees of engagement before the chainring locks. It's a weird sensation at first – most noticeable when pedalling gently over smooth and undulating terrain, as you'll move through the damper's free travel with each cadence. Point the bike uphill on a fireroad where your cadence is strong and consistent and you won't notice any movement, as the unit stays engaged.

Considering Australia isn't known for its steep terrain, and many of us use our enduro bikes across varied conditions, it's worth noting that this vagueness during acceleration might feel off-putting to some riders. However, you'll forget all about it once your wheels are pointing downhill on rougher, more technical trails.

The Chain Damper really comes alive when carrying speed over harsh bumps and big bottom-outs – you effectively feel your feet remain level as your suspension works through its travel. This sensation is foreign if you're used to suspension layouts that naturally tension and pull the chain, especially over rocky tracks with boulders and square edges.

The Chain Damper does a great job quieting down the top movement of the chain, allowing you to hear your suspension and tyres more clearly. It also adds an extra degree of suppleness to the suspension, which translates into incredible confidence to push your limits and tap into more available grip.

One benefit Rimpact claims – and which I hadn't expected to notice so clearly – was reduced fatigue on longer descents. I genuinely felt fresher after hitting some of Brisbane's rougher trails.

Trying to put the effects of the Chain Damper into words is nearly impossible – mainly because it sounds too good to be true for a product that retails for $549 in Australia. Can a component like this really influence your bike's ride characteristics so significantly without major suspension upgrades or a new frame design? Yes, I believe it can.

WHO'S THE CHAIN DAMPER FOR?

If you're reading this and considering a $500+ chainring, you're likely the type of rider who enjoys squeezing every bit of performance from your bike – and yourself. I believe this product does exactly that. It lets you ride faster against the clock while maintaining better control and saving energy over the long haul. If you're serious about riding and optimising every part of your setup, the Rimpact Chain Damper should be high on your list.

Bam Da Silva

Nutrition

FUEL UP: FILLING MEALS TO BOOST IMMUNITY & PERFORMANCE

Try these hearty, filling meals to keep powering through winter

WORDS ZOE WILSON APD / PHOTOS LIFEFORSTOCK, KAMRANAYDINOV & TIMOLINA ON FREEPIK

Winter riding brings a unique set of challenges for mountain bikers. As the temperatures drop and days shorten, the risk of colds and the flu increases, sidelining many from training and racing. To maintain peak performance and avoid the dreaded lurgy, it's essential to fuel with the right nutrition – meals that provide not only energy for rides but also immune-boosting nutrients to keep healthy through the colder months. The following nutrients are key supports for the immune system, will keep you fuller for longer and provide energy to support training, racing and the day to day.

INCLUDE OMEGA-3 FATS

Healthy fats, particularly omega-3 fatty acids, are essential for overall health and can boost your immune system. Omega-3s reduce inflammation in the body, which is crucial for recovery after a long day on the trails. They also support cellular function and are vital for brain health.

Meal Suggestion:

Salmon with sweet potato and spinach

Salmon is one of the best sources of omega-3 fatty acids. Pair it with a roasted sweet potato, a great source of carbohydrates that will help replenish glycogen stores, and a side of spinach, rich in vitamins A and C, which are key players in immune function. The healthy fats in salmon will keep you feeling full and satisfied for hours while providing immune-boosting benefits. Add some herbs like garlic, known for its antiviral properties, to make the meal even more powerful.

BOOST PROTEIN INTAKE

For mountain bikers, protein is a must-have for muscle repair and recovery. Intense rides cause microtears in muscles, and protein helps rebuild and strengthen them. But protein can also play a role in immunity. Amino acids from protein help produce antibodies and strengthen the immune system's ability to fight off bugs.

Meal Suggestion:

Grilled chicken, roast vegie and quinoa bowl

Grilled chicken breast is a lean protein that aids muscle recovery, while quinoa provides all nine essential amino acids. Add a variety of colourful roasted vegetables like sweet potato, capsicum, carrots, and broccoli, which are rich in antioxidants and vitamins such as vitamin C, known for supporting immune health. Top it off with a sprinkle of pumpkin seeds, which are high in zinc –a key mineral for immune function. This hearty bowl will leave you feeling full and energised while providing all the nutritional benefits you need to stay strong and healthy.

EAT ENOUGH CARBOHYDRATE

Carbohydrates are essential for providing energy throughout a ride. When it comes to immunity, carbs are key, too. Eat too little and the body won't have enough to run on, resulting in a weaker immune system and more colds and flu. Additionally, go for wholegrain carbohydrates which are high in fibre, supporting digestion and overall gut health, a crucial component of immunity.

Meal Suggestion:

Lentil Stew with Whole Grain Bread

Lentils are an excellent source of low GI carbohydrates, protein, and fibre. A warm lentil stew, made with tomatoes, onions, garlic, and carrots, will not only satisfy your hunger but also provide immune-boosting nutrients like vitamin C and zinc. Pair it with a slice of whole grain bread to add even more fibre. The fibre in the lentils and bread will help maintain steady blood sugar levels while supporting a healthy gut microbiome, which is essential for a strong immune system.

SUPERCHARGE USING IMMUNE-BOOSTING INGREDIENTS

Eating a variety of vegetables and herbs will provide your body with the micronutrients needed to support your immune system. Many vegetables, such as leafy greens and cruciferous vegetables (think kale, broccoli, cauliflower & cabbage) are packed with antioxidants that fight oxidative stress and promote overall health. Additionally, herbs like ginger and turmeric contain compounds that can help to reduce inflammation and boost immunity.

Meal Suggestion:

Veggie filled stir-fry

A veggie-packed stir-fry is an easy and flavourful way to get a large serving of antioxidants and anti-inflammatory nutrients. Use a mix of broccoli, kale, capsicum, and mushrooms, all of which are rich in vitamins and minerals. Go a step further by adding grated ginger, garlic and turmeric to the stir-fry. Add some protein of your choice to boost recovery from training and serve over brown rice for a dose of low-GI carbohydrates that will keep you full longer and provide energy for your next ride.

PRIORITISE HYDRATION

While solid meals are important, hydration is just as crucial when it comes to boosting immunity and performance. A well-balanced smoothie or freshly squeezed juice can serve as a quick, nutrient-dense option that supports your energy needs while delivering key immune-boosting nutrients.

Meal Suggestion:

Green smoothie

Blend up a green smoothie using ingredients like avocado, kale, and chia seeds for a combination of healthy fats, fibre, and antioxidants. Kale is an excellent source of vitamin C and vitamin K, which are essential for immune function. Avocado adds healthy fats and fibre to keep you satisfied, while chia seeds provide omega-3s and protein. Add some fresh ginger for an anti-inflammatory boost, a touch of sweetness with a banana and some protein powder for an additional boost. This smoothie can be a great post-ride recovery meal, helping you replenish electrolytes, provide the necessary carbs and protein for muscle recovery, and fortify your immune system.

NUTRIENT-DENSE SNACKS

Sometimes, you need something quick and easy that provides both nutrients and energy. Look for snacks that combine protein, healthy fats, and fibre to keep you full while providing immune-boosting benefits.

Snack Suggestion:

Trail mix

A simple trail mix made from a mix of nuts (such as almonds, brazil nuts and walnuts), seeds (such as pumpkin and sunflower), and dried fruits (like cranberries or apricots) can give you a quick energy boost. Nuts and seeds are high in healthy fats, protein, and minerals like magnesium and zinc, which play crucial roles in immune function. The dried fruit adds sweetness while providing antioxidants like vitamin C and fibre.

THE BOTTOM LINE

Eating hearty, filling meals that support your immune system is essential for maintaining peak performance during the colder months. By incorporating a variety of nutrient-dense foods, like healthy fats, lean proteins, low GI carbohydrates, and vegetables, your body will be strong enough to tackle tough trails and also supported in its fight against illness.

Fitness

STEP ON THE GAS!

How to execute High Intensity Interval Training sessions

WORDS ADAM KELSALL / **PHOTOS** MATT ROUSU

In Issue #212 we discussed what constitutes High Intensity Interval Training (HIT), breaking down the individual factors that go into creating a session to build your top end and get you race ready. In this article we expand upon how to prescribe and execute these tough, race-winning sessions and offer a few examples to weave into your training. Whether you live for lycra and the punishment of cross country racing, or prefer the speed and sends of downhill and gravity, HIT can make or break your chance at visiting the podium.

HOW ARE HIT INTERVALS PRESCRIBED?

As a coach, I prescribe HIT Intervals using a variety of methods aiming for a balance between three objectives:

1. **Physiological adaptations,** ensuring the session is targeting the correct energy system.
2. **Race specific adaptations** based on course requirements (e.g. a cross country/XC rider might have 4min climbs in their next race so 4min HIT sessions would make sense). Enduro riders may have a long stage with a bunch of pedalling, so 20/10s or 30/15s would be more specific to racing demands for them
3. **Enjoyment:** is the HIT I'm prescribing a session they will actually complete and enjoy? For example I have riders that hate riding to power targets but eat up sessions using RPE targets so I'll set sessions with RPE instead of power.

Let's discuss how I prescribe sessions.

POWER (WATTS)

Throughout a season a rider will test their power at different durations to benchmark the effectiveness of the training they've been doing. HIT intervals would be aimed at increasing a rider's power over this duration by setting intervals with power targets at or just above current power in order to improve it. Power is particularly effective for measuring HIT intervals, especially of short durations as it reacts instantly to rider input as they increase power during a work interval and decrease it during a recovery interval.

SPEED (KM/H)

While some intervals target physiological improvements, speed is more of a race specific approach, so it may be used in the specific preparation or taper phase leading into a race. If an athlete has an idea of a speed required on a particular XC or enduro course to win or podium in a race they may do intervals at the required speed with recovery between. Over the weeks as the race gets closer the duration of the recoveries decreases so the work intervals more closely replicate the duration of the target race.

HEART RATE (HR)

Aiming to hit HR targets during HIT sessions is largely ineffective as HR will lag, reacting too slowly to changes in rider input while increasing effort during the work block and decreasing effort during the recovery block. HR can also be highly variable based on hydration, sleep, stress and alcohol, making it less dependable for HIT prescription than RPE or power. For HIT intervals I rarely prescribe HR targets.

RATE OF PERCEIVED EXERTION (RPE)

RPE reflects a conscious sensation or feeling of effort describing how hard, heavy, and strenuous exercise is (Buchheit & Laursen, 2013). RPE is measured on a scale of either 1–10 or 6–20 (also called the Borg Scale). I often prescribe climbing efforts, 40/20s and 30/30s measured by RPE in the last few weeks of building into racing so the rider is focused on speed (race specific) and body sensations rather than power alone (physiological).

LACTATE (MMOL/L)

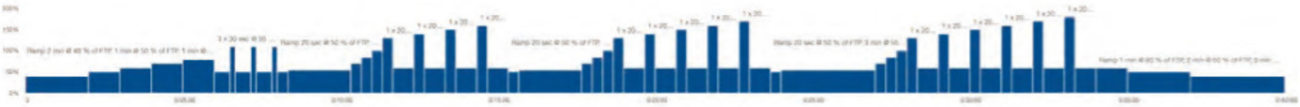
Lactate is expressed in millimoles per litre (mmol/L) and is famously the Norwegian triathlete's favourite metric. Lactate measures the physiological response to HIT at a cellular level. Lactate testing is useful and accurate, however it requires cumulative data and specialised equipment to enact. Lactate testing is difficult to self-administer and measure on the road or trail, however it's perfect for lab-based testing.

HIT SESSIONS FROM COACH ADZ

POWER

Cross Country: 30/30's

Execute this session on a fire trail or gravel road so you can focus on power targets. These targets are calculated as a percentage of your functional threshold power (FTP).



1. **Warm up**
   10min easy,
   10min z2 (56–75%)
   2 x 1min tempo (76–90%) with 1min easy between efforts
   2 x 1min threshold (95–105%) with 1min easy between efforts
   3 x 30sec Vo2 (115 - 125%) with 1min easy between efforts
   3 x 10sec standing sprints as hard as you can with 1min easy spinning between efforts
   5min easy
2. **Main set**
   1 x 4min at threshold (95–100%), 4min easy
   8 x 30sec (110–120%) 30sec easy between efforts (45-55%)
   4min easy
   8 x 30sec (115–125%) 30sec easy between efforts (45-55%)
   4min easy
   8 x 30sec (110–120%) 30sec easy between efforts (45-55%)
3. **Warm down** - 15min easy spin down to finish.

GRAVITY (ERGO) – 20/40S INCREASING

For gravity racers, these efforts are best done on the indoor trainer with power. These targets are calculated as a percentage of your functional threshold power (FTP).

1. **Warm up ramp** - 2min 40%, 1min 50%, 1min 60%, 1min 70%, 1min 80%
   3 x 10sec 110% with 30sec easy between efforts (45-55%)
2. **Main set** -
   2min 55%
   20sec 70%
   20sec 85%
   20sec 100%
   20sec 130%
   40sec 60%
   20sec 140%
   40sec 60%
   20sec 130%
   40sec 60%
   20sec 150%
   40sec 60%
   20sec 160%
   40sec 60%
   20sec 170%
   40sec 60%
   4min easy spinning recovery @50%
   Repeat twice for a total of 3 sets.
3. **Warm down** - 8min easy spinning to finish

SPEED AND RPE

Cross Country: decreasing time fast efforts on trails

1. **Warm up**
   10min easy
   15min endurance (4/10)
   1 x 2min @tempo (7/10), 2min easy
   1 x 2min threshold (8/10) 3min easy
2. **Main set**
   1 x 4min fast at 8/10 intensity with 4min easy recovery
   1 x 3min fast at 8/10 intensity with 3min easy recovery
   1 x 2min fast at 9/10 intensity with 2min easy recovery
   1 x 1min fast at 10/10 intensity with 2min easy recovery

   15 min easy/recovery 4/10

   1 x 4min fast at 8/10 intensity with 4min easy recovery
   1 x 3min fast at 8/10 intensity with 3min easy recovery
   1 x 2min fast at 9/10 intensity with 2min easy recovery
   1 x 1min fast at 10/10 intensity with 2min easy recovery
3. **Warm down**
   15min easy spinning at a high cadence to finish

Gravity: Spicy top end on/off efforts (RPE)

1. **Warm up**
   30min fun riding on trails including plenty of tech
   5 x 10sec standing sprints as hard as you can as you go along the trail with 30sec easy between efforts
   5min easy riding
2. **Main Set**
   5 x 20sec as hard as you can as 10sec standing, 10sec seated as you go along the trail with 60sec easy between efforts

   10min easy

   5 x 30sec as hard as you can as 10sec standing, 20sec seated as you go along the trail with 2min easy between efforts

   10min easy

   5 x 10sec as hard as you can as as you go along the trail with 20sec easy between efforts
3. **Warm down**
   20min fun trail riding to finish

Happy hurting with future HIT sessions! Please get in touch if you have any questions about them.

References

Buchheit, M. & Laursen, P (2013) High-Intensity Interval Training, Solutions to the Programming Puzzle: Part I: Cardiopulmonary Emphasis. *Sports Medicine Auckland*

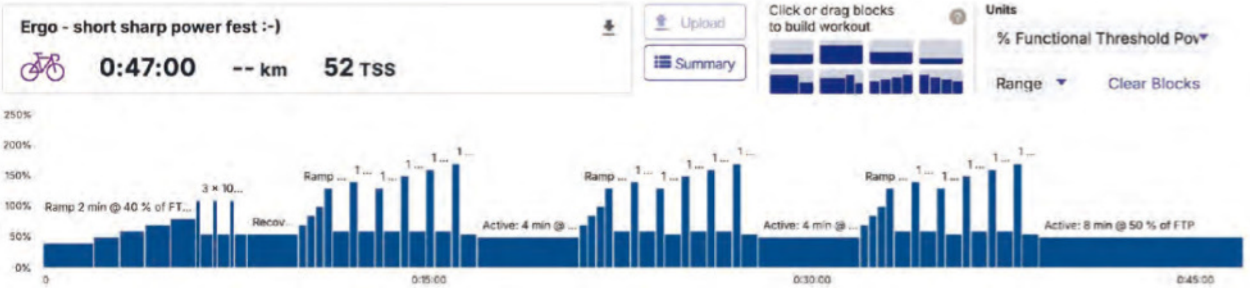
Hebisz (2016) Differences in Physiological Responses to Interval Training in Cyclists with and without Interval Training Experience. *Journal of Human Kinetics. Volume 50. 93 – 101*

McKee, J. (2024) Optimising high-intensity interval training prescription for aerobic adaptions in endurance athletes. *Journal of Australian Strength & Conditioning.*

Rønnestad, B. R. et al. (2013) Short intervals induce superior training adaptations compared with long intervals in cyclists – An effort-matched approach. *Section for Sport Science, Lillehammer University College, Lillehammer, Norway.*

Seiler, S. (2024) It's about the long game, not epic workouts: unpacking HIIT for endurance athletes. *Applied Physiology, Nutrition, and Metabolism.*

Adam Kelsall is a UCI Level 2 Coach & Bachelor Sports Science (Honours) and coaches XCO, DH, bike-packers and sadly a handful of triathletes. He can be contacted via @adzapples on Instagram or follow @heroDirtCycling on X



Ergo - short sharp power fest :-)

0:47:00 -- km 52 TSS

Units: % Functional Threshold Pov

Skills

HOW TO:
MAKING THE MOST OF HERO TRACTION

WORDS JARED RANDO | PHOTOS JORDAN RIDDLE

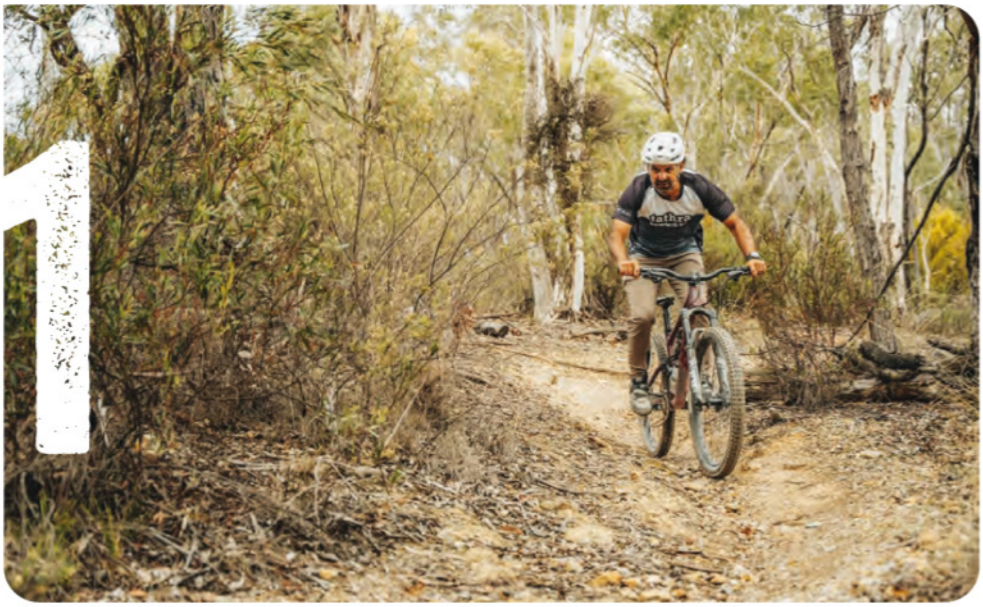
It's one of those days... You're on a multi-day trip, the trails have been dusty as flip, and then all of a sudden it rains overnight. Is it going to be still dry, or muddy? All of a sudden you're out on the trail and it is absolutely prime conditions. Tacky dirt, blue skies, and no matter what you do, you can't seem to lose grip. Welcome to hero dirt!

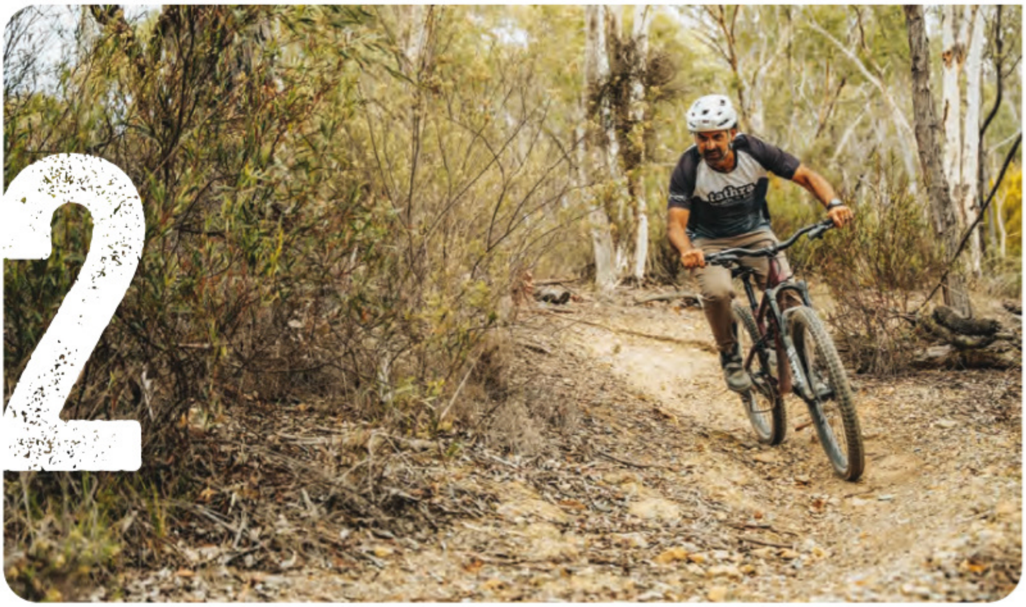
Hero dirt days are few and far between – especially in Australia. In the Alps of Europe and the ranges of North America, you can experience hero dirt on any given day as conditions change rapidly. But in Australia, it doesn't seem to occur all that often due to our environment. So when it does, you've just got to make the most of it!

As Jordan and I went out to shoot this, I was stoked to experience the joy of hero traction. It reminded me of my World Cup racing days in the Alps in the afternoon, when the trail dried up and – for a certain period – the track was absolutely prime. In a race situation, this is the ultimate leveller – everyone has all the grip in the world. On a regular trail day, it's a great time to have some fun, get up to speed, and experiment with some tighter lines. Here's how to rail some corners and have fun on those hero dirt days.

STEP 1 – SETTING UP

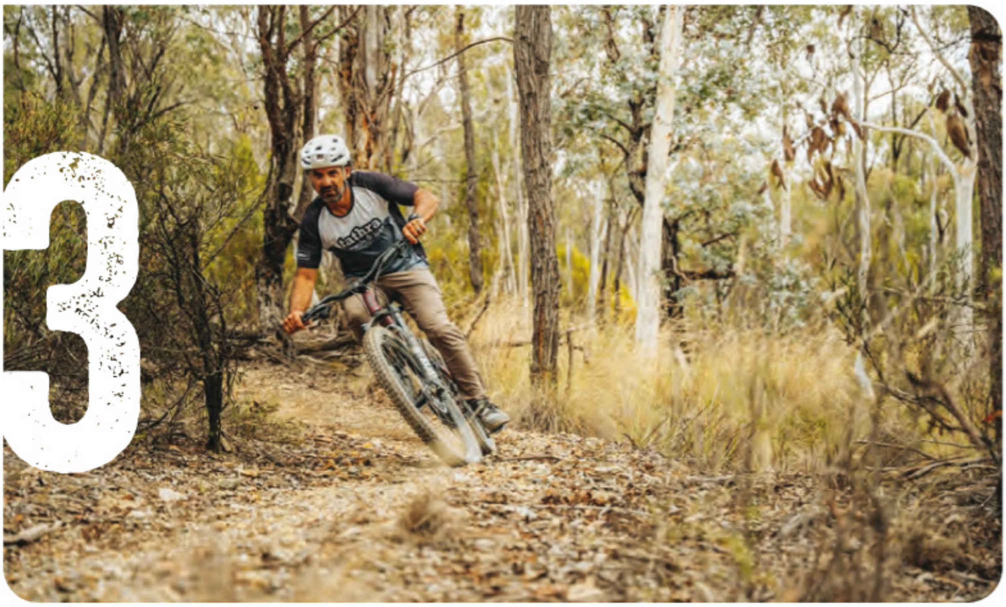
As you come into a corner, there's really no need to worry too much about your line, as the whole trail is going to be grippy and you'll be able to carry speed out no matter what. This makes it a great opportunity to experiment with inside lines. In a race situation, if traction is no issue, the inside line is shorter and therefore faster. Have a look at where you want to go, and pay attention to your braking point. Mentally remind yourself that you can let off the brakes earlier because the traction is optimal.





STEP 2 – COMMIT

As you enter the corner, now is the time to commit. When the trail is super grippy, you need to make the conscious decision early that you're going to hit the corner hard, dig in, and make the most of the conditions. As always, spot your exit line early and look ahead as far as you're comfortable with.

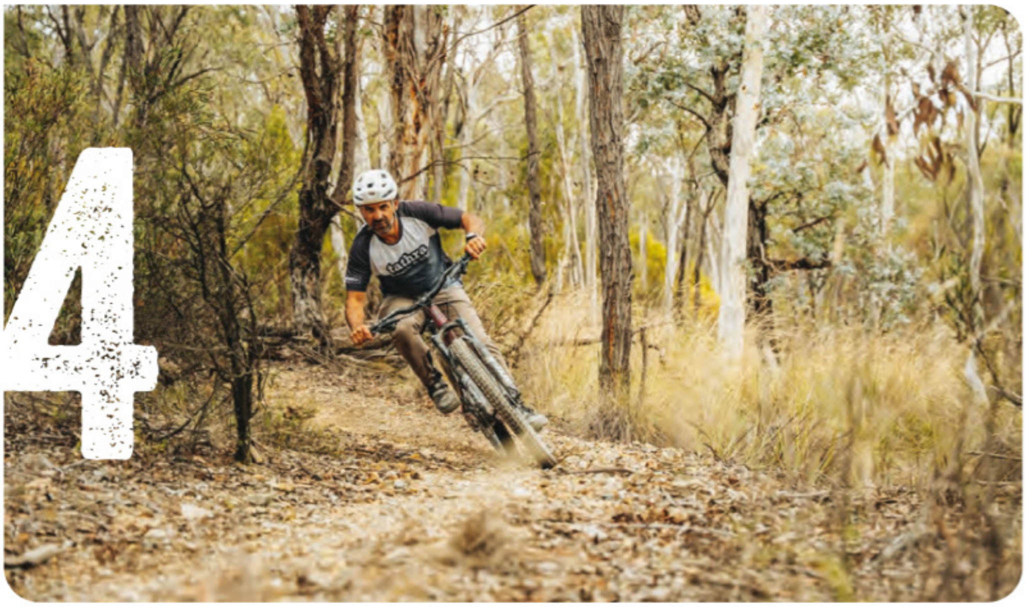


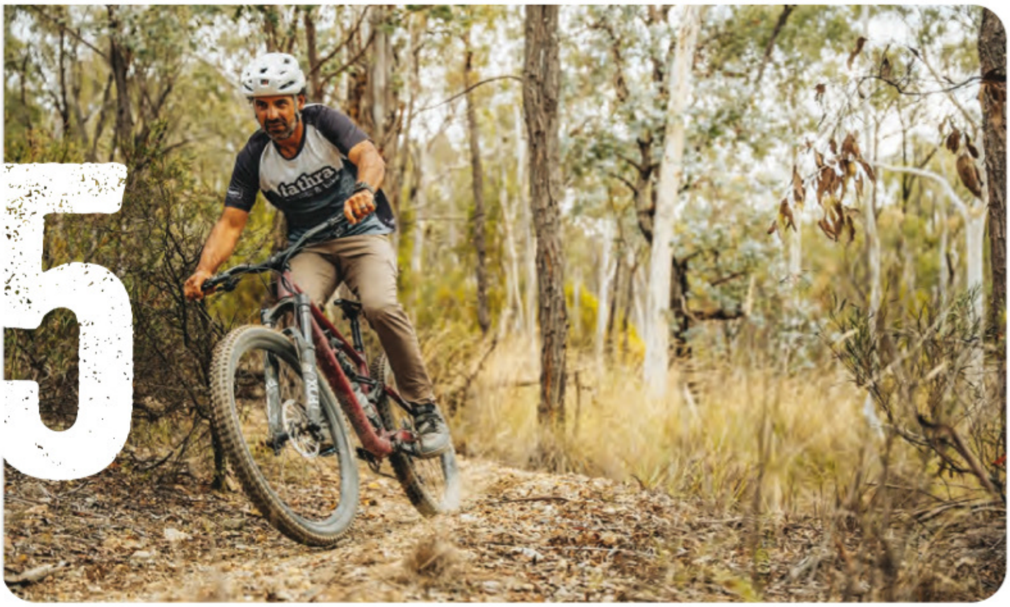
STEP 3 – DIG DEEP

As you hit the corner, use your body to weight the bike as much as you can. Keep your centre of gravity low and centred, and focus on pushing as much weight as you can through your legs. In hero dirt conditions, the more you push, the more you'll grip, so it's really important to dig deep, let off the brakes, and have confidence in your bike and the conditions.

STEP 4 – BE SOLID ON YOUR BIKE

As you roll through the corner, be as solid as you can on your bike. Be strong and hold your position, as any lateral movement will throw you that way with all the grip available. It's almost like tensing up completely when you're at peak traction and everything is digging in. Once you feel the bite into the trail, look up and hold that position – and your line – to the exit.





STEP 5 – POP OUT

This is one of the best parts about hero dirt – your exit speed. You should always judge how well you've hit a corner by your exit speed, and when it's super grippy, I like to 'pop' out of the corner. It's almost like a little bunny hop as you exit and unweight your bike. The unweighting movement produces a little extra pop and speed as you exit, and it's an amazing feeling. Look up to what's ahead, set up for your next corner, and enjoy it while it lasts!

SERVICING YOUR FREEHUB BODY: HOW AND WHY

WORDS RYAN WALSH PHOTOS JORDAN RIDDLE

Your freehub body is one of the hardest-working parts of your bike, consistently moving, put under huge loads and hit with solvents, pressurised water and dirt. After all this, we head out on the next ride!

Over time your freehub body experiences contamination and ingress from water, dirt and even old grease solidifying. This causes the small internal mechanisms (pawls, springs, and ratchets) to function less optimally and if left unchecked you'll experience increased drag, sluggish engagement, freehub slipping under load, or – in the worst case – complete failure.

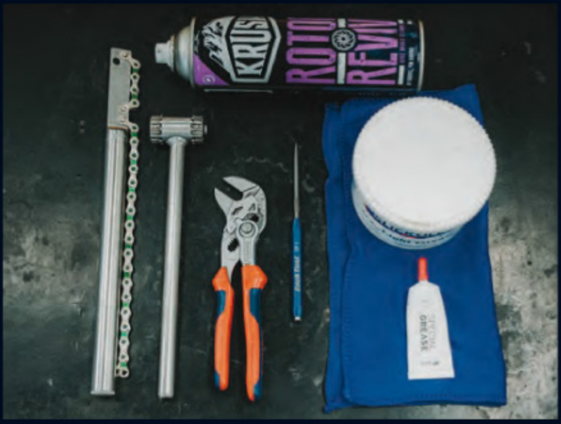
A simple service, even once or twice a year depending on riding conditions, can extend freehub life dramatically, keep engagement crisp, and save you from expensive repairs and nasty crashes.

I recommend servicing your freehub every 6–12 months for general use, but it's especially warranted after any wet, muddy, or high-pressure washing rides or if you experience any engagement issues or grinding noises in the freehub.

Here's how to do it properly.

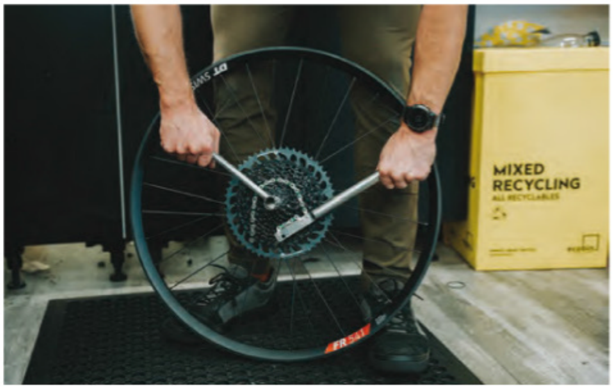
Tools & Supplies You'll Need:

- Cassette lockring tool
- Chain whip
- Small pick
- Isopropyl alcohol/brake cleaner
- High-quality light grease (Slickoleum, Dumonde Tech Freehub Grease, Phil Wood Grease, or similar)
- Clean rags
- A work tray or clean surface to catch small parts



STEP 1: WHEEL AND CASSETTE REMOVAL

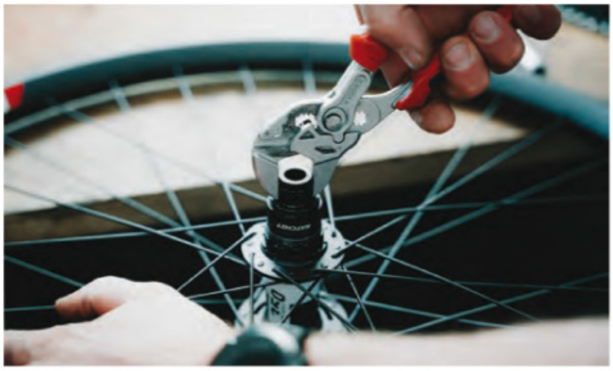
1. Clean your bike
2. Remove the rear wheel from the bike.
3. Use a chain whip to hold the cassette still, then loosen the cassette lockring with the appropriate tool.
4. Remove the cassette, keeping spacers and cogs in the correct order if necessary

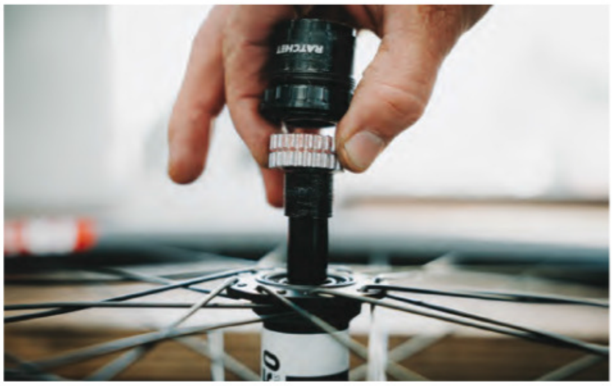


STEP 2: ACCESS THE FREEHUB BODY

1. Remove the hub's end caps, these days most are a friction fit and can be pulled off by hand or with a soft mallet tap or pair of Knippex Pliers
2. Other hubs may require cone spanners or a pair of Knippex Pliers to undo threaded end caps, some may be labled LH thread.
3. Depending on your hub model, the freehub should slide off easily but in some cases the axle may slide through with the freehub.
4. Be careful to remove the freehub over a bench, rag or tray to catch any broken or spring loaded parts that may eject from the hub.

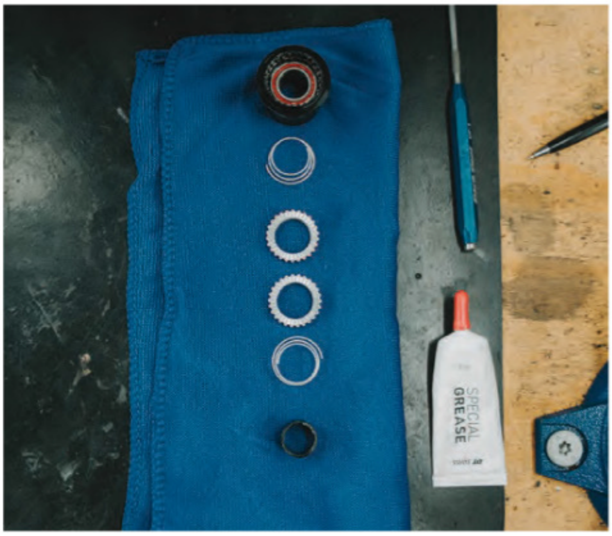
If you're unsure, check the manufacturer's instructions for your specific hub, forcing the wrong part can cause damage.





STEP 3: INSPECT AND DISASSEMBLE

1. With the freehub removed, carefully lay out the components in order or removal, take a photo if required.
2. Remove pawls, springs or ratchets from freehub
3. If possible, carefully remove the outer seal or end cap using a pick.
4. Work over a tray — pawls and springs are small and easily lost.



STEP 4: CLEANING AND LUBRICATION

1. Clean components individually either with clean rag or separately in distillate or ultrasonic cleaner
2. Inspect parts for wear:
   Worn or chipped pawls should be replaced and damaged or missing springs will cause engagement failure, so check all parts thoroughly.
3. Lightly lubricate:
   Apply a small amount of freehub-specific grease to the pawl pivot points and ratchet surfaces, but avoid over-lubrication – excessive grease can cause slow or failed pawl engagement.

SPECIAL
GREASE

STEP 5: REASSEMBLY

1. Reinstall the pawls and springs carefully, ensuring correct seating and movement.
2. Refit the freehub body to the hub.
3. Reinstall end caps.

STEP 6: FINAL CHECK

1. Spin the wheel and listen for a clean, crisp freehub buzz: it's likely a lot quieter than before!
2. Before installing the cassette, clamp the wheel in the frame and tighten the axle. Check – does it spin freely?
3. Install cassette and install on bike.
4. Test pedal engagement. Engagement should feel immediate and smooth, without delay or slippage.
5. Check for lateral play in the hub – if any exists, inspect end caps and internal spacers.

Servicing your freehub isn't difficult with basic tools, some care, and a little attention to detail. A clean, well-lubricated freehub keeps your drivetrain performing at its best – delivering faster engagement, lower rolling resistance, and longer component life. Neglect it, and you're risking costly hub repairs or worse – trail-side mechanical failures.

PURE
SPORTS NUTRITION

FUEL
YOUR
RIDE

15% OFF*
YOUR FIRST ORDER AT
WWW.PURESPORTSNUTRITION.COM

AMB CLASSIFIEDS

We have introduced this new section to make space for our community partners. Contact **ash@ambmag.com.au** to get your spot in the AMB Classifieds.

The baddest 24hr adventure in Australia.

Mapleton, Qld
2-3 August 2025

Mountain Designs

HellsBells
24HR // ADVENTURE RACE

Trek, mountain bike, kayak and navigate up to 120kms of non-stop day and night adventure. Full and half course options available. Book now at **www.hellsbells.com.au**

Wild &Co.

SUSPENSION SALES
EST'D cyclinic 2004
SERVICE & SUPPORT

PROUDLY SERVICING:
Lefty
ROCK SHOX
FOX
PUSH INDUSTRIES

Service jobs ship free both ways!

CYCLINIC.COM.AU

Wild
since 1981
#196
WOMEN WHERE EAST MEETS WEST: SKIING NZ'S MAIN DIVIDE

FREE HELLY HANSEN BEANIE WHEN YOU SUBSCRIBE TO WILD MAG!

HH
HELLY HANSEN
RRP $40

subscribe.wild.com.au

Adventure Racing is back in Canberra!

11-12 Oct 2024

Top Dog 24

Trek, mountain bike, kayak and navigate up to 120kms of non-stop day and night adventure. Full and half course options available. Book now at **www.topdog24.com.au**

Wild &Co.

AUSTRALIAN MOUNTAIN BIKE
AMB

RESERVE YOUR SPOT IN AMB'S NEW COMMUNITY TODAY

BOSCH

Performance meets Control

Invented for life

eBike Systems

The smart
system

BOSCH
Performance Line
CX

Performance Line CX

SHIMANO
XTR
XTR

No compromise.
Wireless
Shifting.